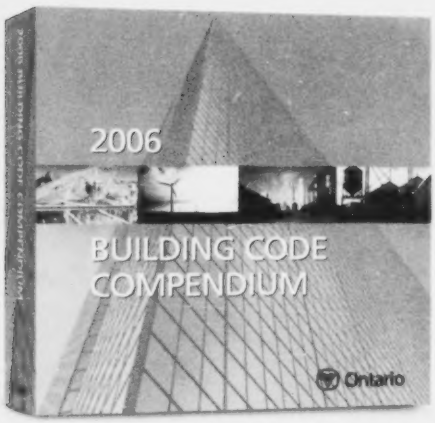
Ontario

Residential Fire Sprinklers & On-site Sewage Systems:

A Consultation on Proposed Changes to Ontario's Building Code

February 15 to May 1, 2008



An electronic copy of the paper is available at www.ontario.ca/buildingcode

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Table of Contents

Introduction 3

A Consultation on Residential Fire Sprinklers and On-site Sewage Systems: 4

Purpose of the Consultation Paper 5

What Happens to the Comments? 5

Building Regulation in Ontario 6

Code Development in Ontario 6

Background Information on Residential Fire Sprinklers and Ontario's Building Code 8

What Changes are Proposed for Residential Sprinklering? 9

Background Information on On-Site Sewage Systems and Ontario's Building Code 11

What Changes are Proposed for On-Site Sewage Systems? 12

Comment Submission 17

Considerations for Comment 19

Comment Forms 21

Appendix A: Proposed Residential Fire Sprinkler Technical Amendments

Appendix B: Proposed On-Site Sewage System Re-inspection and Area Bed Amendments

Introduction

The Building Code Act, 1992 (the Act) is the legislative framework governing the construction, renovation and change of use of buildings. The Building Code is a regulation authorized by the Act, and sets out detailed administrative and technical requirements.

The purposes of the Building Code are set out in s. 34(5) of the Act. These include: establishing standards for public health and safety, fire protection, structural sufficiency, conservation and environmental integrity, and barrier-free accessibility with respect to buildings.

Ontario's buildings are safe and the quality of its drinking water is good. However, the government believes that building safety and water quality can be improved. As a result, the Ministry of Municipal Affairs and Housing (the Ministry) is seeking your views on a number of proposed changes to the Building Code. These changes would enhance the fire safety of Ontarians living and working in residential buildings. The changes would also further protect Ontario's drinking water by improving the performance of existing on-site sewage systems, including septic systems.

This paper sets out proposed changes to the Building Code, their rationale, the way you can offer your views on the content and timing of these proposals.

Please note, the proposals contained herein do not represent final government policy and your views will be considered before the government makes final decisions on the proposed residential fire sprinkler and on-site sewage system amendments to the Building Code.

A Consultation on Residential Fire Sprinklers and On-site Sewage Systems:

The government is proposing to make changes to the Building Code that would:

- Require fire sprinklers in multiple-unit residential buildings over three storeys in height;
- Introduce administrative requirements to support the maintenance (or re-inspection) of existing on-site sewage systems; and
- Establish technical requirements regulating tertiary treatment unit disposal beds ("area beds") that form part of certain on-site sewage systems.

The Ministry is currently undertaking a consultation to seek public input regarding the content and timing of these potential changes. You are encouraged to participate in this important Code development process.

This paper provides an overview of **what** Building Code amendments are being proposed and **why**. The paper also presents the proposed amendments for your review and comment.

In order to help you prepare a response to this consultation, a number of considerations are noted at the end of this paper that serve as a guide to focus on some of the issues at hand.

This paper also outlines a number of ways to submit your comments including the Internet, e-mail, surface mail and facsimile. Comment Forms are provided in this paper, however, you are free to submit additional material in a manner that best allows you to express your views on the proposed Building Code amendments.

This consultation and the comments received will help guide the development of the proposed residential sprinkler and on-site sewage system Building Code amendments.

Purpose of the Consultation Paper

The purpose of this consultation paper is:

Inform

- To inform you about what changes are being proposed to the Building Code and why they are being proposed;

Involve

- To ensure the involvement of the public and Code users including, builders, installers, manufacturers/suppliers, designers, enforcement officials, and property owners in helping to update the Building Code; and

Seek input

- To learn your views on the content and timing of proposed residential fire sprinkler, on-site sewage system re-inspection and area bed amendments to the Building Code.

The development and evolution of the Building Code has historically depended on the support and involvement of our partners.

What Happens to the Comments?

After you have provided your comments, the Ministry will forward the proposed amendments and all comments to its Building Code Technical Advisory Committees (TACs). TACs, comprised of broad, balanced and independent representation of industry technical experts, will review the proposed amendments and all comments. TACs will then make recommendations to the Ministry on the proposed amendments, including whether they should proceed as originally proposed or undergo revision.

Building Regulation in Ontario

The Building Code Act, 1992 (the Act) sets out the legislative framework governing the construction, renovation and change of use of buildings. The Building Code is a regulation made under the Act and sets out technical and administrative requirements.

Enforcement of the Act and Building Code is the responsibility of principal authorities (municipalities, conservation authorities and health units).

The purposes of the Building Code are:

- To establish standards for public health and safety, fire protection, structural sufficiency, conservation and environmental integrity, and to establish barrier-free requirements, with respect to buildings; and

- To establish processes for the enforcement of these standards.

The Building Code does not establish standards for fire safety requirements for existing buildings. Fire safety in existing buildings is regulated through the Fire Code, which is a regulation made under the Fire Protection and Prevention Act, 1997 (FPPA). Both the Fire Code and FPPA are administered by the Ministry of Community Safety and Correctional Services.

Code Development in Ontario

Ontario contributes to the Canadian Federal/Provincial/ Territorial code development process, and Ontario's Building Code is harmonized to a large degree with the model National Building Code of Canada (mNBC). However, there are some areas in which Ontario has chosen to pursue other policy priorities. For example, Ontario has specific standards for rapid transit stations, energy efficiency, water conservation and on-site sewage systems – which are not addressed in the mNBC. Ontario also has Code standards for barrier-free accessibility that are higher than those in the mNBC.

A new version of Ontario's Building Code is developed approximately every five years. The current Code came into effect in 2006. It is anticipated that the next edition of the Building Code will be released in 2010-11, following the expected release of the next mNBC in 2010.

Ontario's Code is, however, subject to interim amendments between releases of new versions. The present consultation proposes interim changes to the 2006 Building Code.

Please note, the proposals contained herein do not represent final government policy and your views will be considered before the government makes final decisions on the proposed residential fire sprinkler and on-site sewage system amendments to the Building Code.

Background Information on Residential Fire Sprinklers and Ontario's Building Code

Safe and getting safer

Ontario's buildings have an excellent record of fire safety. The province has one of the lowest fire fatality rates in the country. Since Ontario introduced its first Building Code over 30 years ago fire fatality rates have declined steadily and fire safety in residential buildings has improved significantly.

These reductions have been, in part, due to enhanced Building Code requirements over time. For instance, the Building Code now requires:

- Smoke alarms on every level in a house;
- Interconnected smoke alarms in a house; and
- Enhanced early warning/notification and detection systems in larger buildings.

As a result, new residential buildings are much safer than older ones.

Adoption of mandatory fire retrofit requirements under the Fire Code has also contributed to the decline in the number of residential fire deaths. The Fire Code includes requirements for high-rise residential buildings, low rise residential buildings and two-unit houses. The Fire Code also requires smoke alarms on all storeys of existing houses.

Further reductions in fire deaths have been achieved through public fire safety education, awareness and residential inspection programs (e.g., to ensure that smoke alarms are properly installed and remain operational).

As noted, Ontario's Building Code is harmonized to a large degree with the model National Building Code of Canada. However, Ontario's Code is different from the mNBC in its approach to the fire safety for large (higher than 3 storey) residential buildings. Where the model National Building Code mandates the installation of fire sprinklers, Ontario's Code places greater reliance on measures ranging from

enhanced fire alarm and detection systems, standpipe systems, firefighters' elevator protection, limitations on combustible materials, exit travel distance limitation and protection of exits and fire separations from smoke infiltration.

Since the mNBC was amended in 1995 to require fire sprinklers in large residential buildings, other provinces and territories have adopted this approach. Most jurisdictions in the United States also require sprinklers in higher residential buildings.

While Ontario's past approach has achieved good results with respect to fire safety in residential buildings, the government is looking at new ways to keep Ontario's buildings at the forefront of fire safety.

What Changes are Proposed for Residential Sprinklering?

This consultation paper proposes that changes be made to the Building Code that would require new multiple-unit residential buildings higher than 3 storeys be sprinklered. Sprinkler requirements within the building would apply to residential suites, service areas, and common areas such as corridors.

The proposed requirements would also cover the residential portions of mixed-use buildings exceeding 3 storeys. Since 1997, the Code has generally required fire sprinklers in other non-residential occupancies in high buildings.

This consultation paper is not proposing to require sprinklers in smaller residential buildings, including houses, nor mandate the retrofit of existing buildings.

As a result of the proposed mandating of residential fire sprinklers, other changes are proposed to coordinate Ontario's fire safety requirements with those of the mNBC. For example, Ontario-specific requirements for heat detection, smoke management, combustible cladding and firewalls would generally be brought into line with those in the mNBC.

Transition

The Building Code requirements related to residential sprinklers are proposed come into force on September 1, 2009.

Background Information on On-site Sewage Systems and Ontario's Building Code

There are an estimated 1.2 million on-site sewage systems in Ontario. When properly designed, installed and maintained in accordance with the Building Code, on-site sewage systems contribute to safe drinking water and protect the environment.

In 1998, the Building Code was amended to establish standards for new and renovated on-site sewage systems for houses and small buildings where the systems are contained on one lot and have a daily design sewage flow of not more than 10,000 litres per day. Other larger and more complex systems are regulated under the Ontario Water Resources Act administered by the Ministry of the Environment.

The Building Code regulates the construction, installation, repair, alteration and extension of on-site sewage systems. The Code classifies sewage systems as follows:

Classes of septic systems

- Class 1 — a chemical toilet, an incinerating toilet, a recirculating toilet, a self-contained portable toilet and all forms of privy including a portable privy, an earth pit privy, a pail privy, a privy vault and a composting toilet system;
- Class 2 — a greywater system;
- Class 3 — a cesspool;
- Class 4 — a leaching bed system; and
- Class 5 — a system that requires or uses a holding tank for the retention of hauled sewage at the site where it is produced prior to its collection by a hauled sewage system.

The Building Code also contains operation and maintenance requirements for on-site sewage systems. In particular, the Code requires that all on-site sewage systems be operated and maintained to prevent breakout of effluent to the surface, leakage from any component of the system, or leakage into ground water or surface water. Moreover, sewage systems must be operated in

accordance with the basis on which their construction was approved and the manufacturer's requirements.

There is great variety within the Class 4 category, which represents the most common type of small, on-site sewage system in Ontario. However, most Class 4 systems include a septic tank and leaching bed, and rely on gravity to move effluent through its components.

Some Class 4 systems contain additional components such as pumps, filters and secondary and tertiary treatment units. Under the Building Code, a Class 4 system that incorporates a tertiary treatment unit may be designed with a specific type of trench-based absorption system known as a shallow buried trench. In addition, other Class 4 systems utilizing certain tertiary treatment units may be designed with a bed-type absorption system known as an "area bed".

Standards for "area bed" systems, however, are not set out in the Building Code, but their use has been authorized by the Building Materials Evaluation Commission (BMEC).

The BMEC is a regulatory body authorized under the Building Code Act, 1992, whose mandate is to evaluate new and innovative construction materials, systems and designs for use in construction in Ontario. Since 1998 the BMEC has issued eight separate "area bed" authorizations for use in construction in Ontario. (Authorizations of the BMEC are available on the Building Code website at www.ontario.ca/building code.)

Under the Building Code Act, 1992 and Building Code enforcement of the on-site sewage provisions of the Act and Code is carried out by principal authorities (municipalities, health units and conservation authorities).

What Changes are Proposed for On-Site Sewage Systems?

This consultation paper proposes two types of Building Code amendments related to on-site sewage systems:

- Administrative requirements for maintenance inspections (re-inspections) of on-site sewage systems; and
- Technical requirements for area beds.

Maintenance Inspections

1) Administrative Requirements for Maintenance Inspections

In response to the events in Walkerton of 2000, the Government of Ontario appointed a public inquiry, which resulted in Justice Dennis O'Connor's report in 2002. The report concluded that drinking water should be protected at its source through a coordinated planning process. Among other matters, improperly installed and poorly maintained septic systems were identified as a potential threat to drinking water.

In response to Justice O'Connor's report, the government introduced the Clean Water Act, 2006, which was proclaimed in force on July 3, 2007. This legislation permits communities to protect their municipal drinking water supplies by creating multi-stakeholder committees that are required to develop collaborative, locally driven, science-based protection plans. These committees will identify potential risks to local water sources and identify actions to be taken to reduce or eliminate these risks.

The Clean Water Act, 2006 included complimentary amendments to the Building Code Act, 1992, concerning maintenance inspection programs for on-site sewage systems.

These amendments authorize regulations to establish programs to enforce the Building Code's standards for the maintenance and operation of existing sewage systems, and to require that these programs be enforced by principal authorities.

It is proposed that required maintenance inspection programs would apply to sewage systems located in prescribed areas. These areas are anticipated to be a subset of the "vulnerable areas" identified in an assessment report included in a source protection plan subject to posting on the environmental registry in accordance with section 30 of Clean Water Act, 2006. The method of delineating these areas will be set out in future technical rules under the Clean Water Act, 2006.

Questions related to the Clean Water Act, 2006 and source protection plans can be directed to:

"Ask the Expert" at source.protection@ontario.ca
Source Protection Programs Branch
Ministry of the Environment
8th Floor, 2 St Clair Ave W
Toronto, ON, M4V1L5

The amendments to the Building Code Act, 1992 also authorize principal authorities to establish "discretionary" maintenance inspection programs for existing sewage systems. These programs would be subject to provisions under the Building Code.

The amendments to the Building Code Act, 1992 authorize principal authorities to pass by-laws, regulations or resolutions governing both types of programs.

The amendments to the Building Code Act, 1992 also provide for the Building Code to authorize principal authorities to accept a certificate ("third party certificate"), as an alternative to conducting an inspection, confirming that a sewage system has been inspected and found to comply with the applicable Building Code standards.

This consultation paper proposes that changes be made to the Building Code to establish the following details related to required and discretionary maintenance inspection programs:

- Classes of sewage systems affected;
- Areas affected;
- Qualifications of inspectors;
- The frequency of inspections; and
- Requirements related to third party certificates.

The purpose of the proposed standards for maintenance inspections is to assess compliance with Section 8.9, Operation and Maintenance, of the Building Code in respect of existing on-site sewage systems. These proposed administrative amendments are intended to assure compliance with Section 8.9 in order to better support the Code's health and safety and environmental integrity objectives.

This consultation paper proposes a maintenance inspection methodology for possible inclusion as an Appendix Note to the Building Code. This methodology could be considered by principal authorities when designing maintenance inspection programs for on-site sewage systems.

Transition

The Building Code requirements related to discretionary maintenance inspection programs are proposed to come into force on January 1, 2009.

The required programs will not be in force until a source protection plan for a given area is approved by the Minister of the Environment. The plans are required under O. Regulation 285/07 made under the Clean Water Act, 2006, and are anticipated to be submitted to the Minister of the Environment by 2012.

Area Beds

2) Technical Requirements for Area Beds

The Ministry is also seeking comments on proposed technical changes to Part 8 of Division B in respect of the design and construction of area bed on-site sewage systems.

Area beds are a soil absorption system used in conjunction with an on-site sewage system that includes a tertiary treatment unit listed in the supplementary standards (SB-5) to the Building Code. Area beds are designed to further treat and disperse effluent within the soil. They are comprised of a stone layer situated on top of a sand layer and may be installed in or on soil.

The Building Code does not presently contain specific requirements relating to the design and construction of area bed systems. The Ministry is proposing to establish area bed requirements in the Building Code.

Specifically, the proposed construction requirements for area beds include:

- Their size or footprint;
- Sizing the stone and sand layers and when a "mantle" of imported fill is necessary;
- Their thickness and the type of sand used;

- Means of ensuring proper distribution of effluent; and
- Maintenance and testing.

Transition

The proposed Building Code requirements related to area bed systems are proposed to come into force upon filing.

Comment Submission

We look forward to receiving your comments on the proposed technical and administrative changes to the Building Code. Your active involvement helps ensure that potential Code changes are fully informed, are technically and economically feasible, and are enforceable.

Note: This "hardcopy" or "paper" edition of the Consultation Paper is reproduced on the Building Code website at www.ontario.ca/buildingcode, which provides for online feedback.

Steps to submission:

- Review this consultation paper, including the specific regulatory proposals;
- Complete Part A of the Comment Form included in this Consultation Paper; and
- Complete Parts B and/or C, depending on which proposed Building Code amendments you would like to comment on.

Your response to this consultation must be received by the Ministry by:

Submission Deadline

May 1, 2008

In order to maximize the effectiveness of your comments and to fully understand your views, we ask that your comments relate to the specific proposed changes listed in this consultation. A comment that refers to other requirements in the Code, for which no change is proposed, will not be considered as part of this consultation. However, should you wish to comment on other Code requirements, you may do so by completing the "Code Change Request Form to 2006 Building Code" available on the Building Code website at:

www.ontario.ca/buildingcode

If you do not support the proposed changes, or would support the changes with modifications, please include an explanation of the rationale for your concerns to help the Ministry and the Technical Advisory Committees understand your views.

In reviewing the proposed changes, you are encouraged to keep in mind a number of considerations related to the benefits and impacts of the proposed changes. Some possible considerations are set out below.

For tracking purposes please remember to include the following on each Comment Form:

- Your name;
- Your mailing address; and
- Whether you are responding on behalf of yourself or an organization.

Completed Comment Forms and supporting documents may be submitted to the Ministry by website, e-mail, fax, or mail:

www.ontario.ca/buildingcode:

This website provides for online feedback.

e-mail:

sabina.filipescu@ontario.ca

Subject Line: 2008 Building Code Consultation

Mail:

2008 Building Code Consultation
c/o Building and Development Branch
Ministry of Municipal Affairs and Housing
777 Bay Street – 2nd Floor
Toronto, ON
M5G 2E5

Fax:

(416) 585-7531

Subject Line: 2008 Building Code Consultation

Any questions on the consultation may be directed to:

- David Brezer, Director and Chief Building Official
  (416) 585-6656
- Sabina Filipescu, Policy Advisor
  (416) 585-6753

Considerations for Comment

Below is a list of things to keep in mind when preparing your submission to the consultation.

Considerations regarding the proposed requirements for residential fire sprinklers

1. Are the proposed amendments consistent with the stated goal of improving public safety? What life safety benefits would you expect to see as a result of these changes?

2. Are there any additional construction and ongoing maintenance costs or other issues related to residential sprinklers that should be considered?

3. What are the economic benefits resulting from the manufacture, installation and testing of sprinkler systems in multiple-unit residential buildings exceeding three storeys?

4. Is there sufficient capacity within the industry to design, manufacture, supply, install, maintain and test sprinkler systems in multiple-unit residential buildings exceeding three storeys?

5. Does the proposed transition period provide sufficient time for industry/stakeholders to prepare for these Code changes?

6. Are there alternatives that could achieve similar fire safety outcomes?

7. Are the proposed Code changes enforceable as written? What is the impact on enforcement bodies?

8. Would any additional technical training be required for building officials, builders, designers, trades, etc?

Considerations regarding the proposed requirements for on-site sewage systems

1. What are the economic benefits resulting from the manufacture, installation and repair of on-site sewage systems?

2. Is there sufficient capacity within the industry to design, manufacture, supply, install, maintain and test on-site sewage systems?

3. Do the proposed technical area bed standards provide an acceptable level of health and safety and environmental protection?

4. Do the proposed transition periods provide sufficient time for industry/stakeholders to prepare for these Code changes?

5. Are there implementation alternatives (e.g., qualification of inspectors, frequency of inspections) that could achieve similar outcomes?

6. Are the proposed Code changes readily enforceable? What are the impacts on local authorities to undertake maintenance inspections?

7. Is the proposed maintenance inspection methodology helpful? If so, what form should it take (e.g., regulations within the Building Code, an Appendix Note)?

8. Would any additional technical training be required for building officials, builders, designers, installers, septage haulers, etc?

Comment Forms *

A. Respondent Information

Name: _____

Title: _____

I am responding on behalf of: ❒ Myself

❒ Organization (specify): _____

Function: ❒ Building Official ❒ Designer ❒ Supplier / Manufacturer

❒ Builder / Contractor ❒ Installer / Hauler ❒ Property owner / Public

❒ Other (specify): _____

Address: _____

City: _____ **Province:** _____ **Postal Code:** _____

Personal information provided in responses to the Residential Fire Sprinklers & On-site Sewage Systems Consultation is collected under the authority of subsection 38(2) of the Freedom of Information and Protection of Privacy Act, R.S.O. 1990, F.31 for consultative purposes and for contacting you should we need to clarify your response to this consultation.

Responses to the consultation (minus business addresses, where provided) may be shared with provincial and national building and fire code development committees.

Questions about the collection of personal information may be addressed to James Ross, Coordinator of Policy and Legislation, Building and Development Branch, Ministry of Municipal Affairs and Housing, 777 Bay Street, 2nd Floor, Toronto, Ontario, (416) 585-4243 Fax: (416) 585-7531.

* Note: This "hardcopy" or "paper" edition of the Consultation Paper is reproduced on the Building Code website at www.ontario.ca/buildingcode, which provides for online feedback.

Comment Forms *(cont'd)*

B. Proposed Residential Fire Sprinkler Requirements

Mark one of the following with "x":

- ❒ I support the proposed **residential fire sprinkler** requirements.
- ❒ I would support the proposed **residential fire sprinkler** requirements with modifications (please indicate modifications below).
- ❒ I do not support the proposed **residential fire sprinkler** requirements (please indicate reason below).

Comments (*Please attach additional sheets as necessary*):

Comment Forms *(cont'd)*

C. Proposed On-site Sewage System Requirements

Mark one of the following with "x":

- ❒ I support the proposed **on-site sewage system** requirements
- ❒ I would support the proposed **on-site sewage system** requirements with modifications (please indicate modifications below)
- ❒ I do not support the proposed **on-site sewage system** requirements (please indicate reason below).

Comments *(Please attach additional sheets as necessary):*

Appendix A: Proposed Residential Fire Sprinkler Technical Amendments

CHANGE NUMBER	DESCRIPTION
A-01-04-01	Revise the definition of *live/work unit* Clause 1.4.1.2.(1)(b) of Division A.
B-03-01-01	Remove the 6 storey height limitation for sprinklered buildings with combustible wall components conforming to Sentence 3.1.5.5.(1) of Division B.
B-03-01-02	Delete the requirement that firewalls in buildings regulated by the provisions of Subsection 3.2.6. be constructed of masonry or concrete.
B-03-02-01	Mandate the installation of fire sprinklers in multiple-unit residential buildings over three storeys in height in Articles 3.2.2.42. and 3.2.2.43. of Division B.
B-03-02-02	Permit unsprinklered 2-storey stacked townhouses of noncombustible construction in buildings up to 4 storeys in height.
B-03-02-03	Harmonize the requirements of Subsection 3.2.6. of Division B with the model National Building Code.
B-03-03-01	Harmonize the provisions for fire separations around multi level dwelling units in Sentence 3.3.4.2.(3) of Division B with the model National Building Code.
B-03-03-02	Require separated means of egress from each dwelling unit in 2-storey stacked townhouses of noncombustible construction in unsprinklered buildings up to 4 storeys in height.
B-11-04-01	Define reduction in performance level resulting from a to change in major occupancy to a Group C occupancy.
B-11-04-02	Mandate the installation of fire sprinklers in a storey subject to a change in major occupancy to a Group C occupancy in existing buildings.

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February 2008	Proposed Technical Change: 2006 Building Code		
CHANGE NUMBER	**A-01-04-01**	**CODE REFERENCE**	**Div. A, 1.4.1.2.(1)(b)**
DESCRIPTION OF PROPOSED AMENDMENT	Revise definition of *live/work unit* to increase its maximum permitted size		

EXISTING BUILDING CODE PROVISIONS

Live/work unit means a *dwelling unit* that contains a subsidiary *business and personal services occupancy* or a subsidiary *low hazard industrial occupancy*, has an area of not more than 150 m^2, and is used and operated by one or more persons of a single household.

PROPOSED BUILDING CODE CHANGE

Revise the definition of *live/work unit* in Clause 1.4.1.2.(1)(b) as follows:

Live/work unit means a *dwelling unit* having an area of not more than 200 m^2 that contains a subsidiary *business and personal services occupancy* or a subsidiary *low hazard industrial occupancy*, and which is used and operated by one or more persons of a single household.

Rationale: PROBLEM	The area of live/work units is restricted to 150 m^2.
Rationale: JUSTIFICATION	The proposed amendments to Subsection 3.2.2. concerning sprinklering ensure that all new high buildings will be sprinklered. Therefore, the fire safety benefits of sprinklers allow an increase in the maximum area of a *live/work unit* without reducing fire safety.
IMPACT	Greater design flexibility. Greater consumer choice in accommodation.

OBJECTIVE BASED ANALYSIS OF THE CHANGED OR NEW PROVISION	
Provision	Division A, Sentence 1.4.1.2.(1).
Objectives	Not Applicable.
Functional Statements	Not Applicable.

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February 2008	Proposed Technical Change: 2006 Building Code		
CHANGE NUMBER	**B-03-01-01**	**CODE REFERENCE**	**Div. B, 3.1.5.5.(1)**
DESCRIPTION OF PROPOSED AMENDMENT	Remove the 6 storey height limitation for sprinklered buildings with combustible wall components conforming to Sentence 3.1.5.5.(1) of Division B.		

EXISTING BUILDING CODE PROVISIONS

3.1.5.5. Combustible Components for Exterior Walls

(1) Except for an *exposing building face* required to conform to Sentence 3.2.3.7.(1) or Sentence 3.2.3.7.(4), an exterior non-*loadbearing* wall assembly that includes *combustible* components is permitted to be used in a *building* required to be of *noncombustible construction* provided,

(a) the *building* is,
  (i) not more than 3 *storeys* in *building height*, or
  (ii) not more than 6 *storeys* in *building height* if *sprinklered*,

(b) the interior surfaces of the wall assembly are protected by a thermal barrier conforming to Sentence 3.1.5.11.(3), and

(c) the wall assembly satisfies the criteria of Sentences (2) and (3) when subjected to testing in conformance with CAN/ULC-S134, "Fire Test of Exterior Wall Assemblies".

PROPOSED BUILDING CODE CHANGE

Revise Clause (1)(a) as follows:

(a) the *building* is,
  (i) not more than 3 *storeys* in *building height*, or
  (ii) *sprinklered*.

Rationale: PROBLEM	The model National Building Code does not limit the height of sprinklered buildings that incorporate exterior non-loadbearing wall assemblies that include combustible components in conformance with Sentence 3.1.5.5.(1) of Div. B.
Rationale: JUSTIFICATION	The proposed amendments to Subsection 3.2.2. concerning sprinklering ensure that all new high buildings will be sprinklered. Since the model National Building Code also requires sprinklering of all high buildings, there is no longer any need to maintain higher requirements in Ontario's Building Code for incorporate exterior non-loadbearing wall assemblies that include combustible components .
IMPACT	Construction cost savings. Greater design flexibilty. Better harmonization of building codes across Canada.

OBJECTIVE BASED ANALYSIS OF THE CHANGED OR NEW PROVISION	
Provision	Division B, Sentence 3.1.5.5.(1).
Objectives	No change.
Functional Statements	No change.

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February 2008	Proposed Technical Change: 2006 Building Code		
CHANGE NUMBER	**B-03-01-02**	**CODE REFERENCE**	**Div. B, 3.1.10.2.(4)**
DESCRIPTION OF PROPOSED AMENDMENT	Delete the requirement that firewalls in buildings regulated by the provisions of Subsection 3.2.6. be constructed of masonry or concrete.		

EXISTING BUILDING CODE PROVISIONS

3.1.10.2. Rating of Firewalls

(4) A *firewall* permitted to have a *fire-resistance* rating not more than 2 h need not be constructed of masonry or concrete provided,

(a) the assembly providing the *fire-resistance rating* is protected against damage that would compromise the integrity of the assembly,

(b) the design conforms to Article 4.1.5.18.,

(c) the level of performance of the *firewall* is not less than of masonry or concrete in the areas of,

  (i) performance during fire conditions,

  (ii) mechanical damage during the normal use of the *building*, and

  (iii) resistance to damage from moisture,

(d) the *firewall* separates *building* or *buildings* with *floor areas* that do not contain,

  (i) a Group B, Division 1 *major occupancy*, or

  (ii) a Group B, Division 2 *major occupancy*, and

(e) the *firewall* does not separate *buildings* regulated by the provisions of Subsection 3.2.6.

PROPOSED BUILDING CODE CHANGE

Delete Clause 3.1.10.1.(2)(e).

Rationale: PROBLEM	Presently, Group C major occupancy buildings regulated by the provisions of Subsection 3.2.6. need not be sprinklered, unlike similar buildings constructed under the mNBC. As a compensating provision, Ontario's building code requires that firewalls in these buildings be constructed of masonry or concrete.
Rationale: JUSTIFICATION	2008 changes to Ontario's building code will require Group C occupancy buildings to be sprinklered. With this change Ontario's building code will harmonize with the mNBC which permits non masonry/concrete firewalls in buildings regulated by the provisions of Subsection 3.2.6.
IMPACT	Construction cost savings. Greater design flexibilty. Better harmonization of building codes across Canada.

OBJECTIVE BASED ANALYSIS OF THE CHANGED OR NEW PROVISION	
Provision	Division B, Sentence 3.1.10.1.(2)
Objectives	No change.
Functional Statements	No change.

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February 2008	Proposed Technical Change: 2006 Building Code		
CHANGE NUMBER	**B-03-02-01**	**CODE REFERENCE**	**Div. B, 3.2.2.42. and 3.2.2.43.**
DESCRIPTION OF PROPOSED AMENDMENT	Mandate the installation of fire sprinklers in multiple-unit residential buildings over three storeys in height.		

EXISTING BUILDING CODE PROVISIONS

3.2.2.42. Group C, Any Height, Any Area

(1) Except as permitted by Articles 3.2.2.43. to 3.2.2.48., a *building* classified as Group C shall conform to Sentence (2).

(2) Except as permitted by Article 3.2.2.16., the *building* referred to in Sentence (1) shall be of *noncombustible construction*, and

(a) reserved,
(b) except as permitted by Sentence (3), floor assemblies shall be *fire separations* with a *fire-resistance rating* not less than 2 h,
(c) *mezzanines* shall have a *fire-resistance rating* not less 1 h,
(d) if the *building* is not *sprinklered*, roof assemblies shall have a *fire-resistance rating* not less than 1 h, and
(e) *loadbearing* walls, columns and arches shall have a *fire-resistance rating* not less than that required for the supported assembly.

(3) In a *building* that contains *dwelling units* that have more than 1 *storey*, subject to the requirements of Sentence 3.3.4.2.(3), the floor assemblies, including floors over *basements*, which are entirely contained within these *dwelling units*, shall have a *fire-resistance rating* not less than 1 h but need not be constructed as *fire separations*.

3.2.2.43. Group C, up to 6 Storeys

(1) A *building* classified as Group C is permitted to conform to Sentence (2) provided,

(a) it is not more than 6 *storeys* in *building height*, and
(b) it has a *building area* not more than the value in Table 3.2.2.43.A. or Table 3.2.2.43.B.

(2) The *building* referred to in Sentence (1) shall be of *noncombustible construction*, and,

(a) except as permitted by Sentence (3), floor assemblies shall be *fire separations* with a *fire-resistance rating* of not less than 1 h,
(b) *mezzanines* shall have a *fire-resistance rating* of not less than 1 h,
(c) if the *building* is not *sprinklered*, roof assemblies shall have a *fire-resistance rating* not less than 1 h, and
(d) *loadbearing* walls, columns and arches shall have a *fire-resistance rating* not less than that required for the supported assembly.

Table 3.2.2.43.A.
Maximum Building Area, Group C, up to 6 Storeys
Forming Part of Sentence 3.2.2.43.(1)

No. of *Storeys*	Maximum Area, m^2		
	Facing 1 *Street*	Facing 2 *Streets*	Facing 3 *Streets*
1	unlimited	unlimited	unlimited
2	6 000	unlimited	unlimited
3	4 000	5 000	6 000
4	3 000	3 750	4 500
5	2 400	3 000	3 600
6	2 000	2 500	3 000
Column 1	2	3	4

Table 3.2.2.43.B.
Maximum Building Area, Group C, up to 6 Storeys, Sprinklered
Forming Part of Sentence 3.2.2.43.(1)

No. of *Storeys*	Maximum Area, m^2
1	unlimited
2	unlimited
3	12 000
4	9 000
5	7 200
6	6 000
Column 1	2

(3) In a *building* that contains *dwelling units* that have more than 1 *storey*, subject to the requirements of Sentence 3.3.4.2.(3), the floor assemblies, including floors over *basements*, which are entirely contained within these *dwelling units*, shall have a *fire-resistance rating* not less than 1 h but need not be constructed as *fire separations*.

PROPOSED BUILDING CODE CHANGE

Delete existing Articles 3.2.2.42 to 2.2.2.44. of Division B and replace with the following:

3.2.2.42. Group C, Any Height, Any Area, Sprinklered

(1) Except as permitted by Articles 3.2.2.43. to 3.2.2.48., a *building* classified as Group C shall conform to Sentence (2).

(2) Except as permitted by Article 3.2.2.16., the *building* referred to in Sentence (1) shall be of *noncombustible construction*, and

(a) except as permitted by Sentence 3.2.2.7.(1), the *building* shall be *sprinklered*,
(b) except as permitted by Sentence (3), floor assemblies shall be *fire separations* with a *fire-resistance rating* not less than 2 h,
(c) *mezzanines* shall have a *fire-resistance rating* not less than 1 h, and
(d) *loadbearing* walls, columns and arches shall have a *fire-resistance rating* not less than that required for the supported assembly.

(3) In a *building* that contains *dwelling units* that have more than 1 *storey*, subject to the requirements of Sentence 3.3.4.2.(3), the floor assemblies, including floors over *basements*, which are entirely contained within these *dwelling units*, shall have a *fire-resistance rating* not less than 1 h but need not be constructed as *fire separations*.

3.2.2.43. Group C, up to 6 Storeys, Sprinklered

(1) A *building* classified as Group C is permitted to conform to Sentence (2) provided,
(a) except as permitted by Sentence 3.2.2.7.(1), the *building* is *sprinklered*,
(b) it is not more than 6 *storeys* in *building height*, and
(c) it has a *building area*
  (i) that is not limited if the *building* is not more than 2 *storeys* in *building height*,
  (ii) not more than 12 000 m^2 if 3 *storeys* in *building height*,
  (iii) not more than 9 000 m^2 if 4 *storeys* in *building height*,
  (iv) not more than 7 200 m^2 if 5 *storeys* in *building height*, or
  (v) not more than 6 000 m^2 if 6 *storeys* in *building height*.

(2) Except as permitted by Article 3.2.2.16., the *building* referred to in Sentence (1) shall be of *noncombustible construction*, and,
(a) except as permitted by Sentence (3), floor assemblies shall be *fire separations* with a *fire-resistance rating* of not less than 1 h,
(b) *mezzanines* shall have a *fire-resistance rating* of not less than 1 h, and
(c) *loadbearing* walls, columns and arches shall have a *fire-resistance rating* not less than that required for the supported assembly.

(3) In a *building* that contains *dwelling units* that have more than 1 *storey*, subject to the requirements of Sentence 3.3.4.2.(3), the floor assemblies, including floors over *basements*, which are entirely contained within these *dwelling units*, shall have a *fire-resistance rating* not less than 1 h but need not be constructed as *fire separations*.

Rationale: PROBLEM	Further improve the safety of new residential buildings higher than 3 storeys.
Rationale: JUSTIFICATION	Enhance the fire safety of Ontarians living and working in residential buildings by harmonizing the requirements for fire sprinkler systems with the model National Building Code.
IMPACT	Increased safety for occupants of residential buildings. Better harmonization of building codes across Canada. Increased capital costs of \$15/m^2 - \$40/m^2 Increased maintenance costs.

OBJECTIVE BASED ANALYSIS OF THE CHANGED OR NEW PROVISION	
Provision	Division B, Sentence 3.2.2.42.(2)
Objectives	No change.
Functional Statements	No change.
Provision	Division B, Sentence 3.2.2.43.(3)
Objectives	No change.
Functional Statements	No change.

OBJECTIVE BASED ANALYSIS OF THE CHANGED OR NEW PROVISION	
Provision	Division B, Sentence 3.2.2.43.(1)
Objectives	No change.
Functional Statements	No change.
Provision	Division B, Sentence 3.2.2.43.(2)
Objectives	No change.
Functional Statements	No change.
Provision	Division B, Sentence 3.2.2.43.(3)
Objectives	No change.
Functional Statements	No change.

February 2008	Proposed Technical Change: 2006 Building Code		
CHANGE NUMBER	B-03-02-02	CODE REFERENCE	Div. B, 3.2.2.44.
DESCRIPTION OF PROPOSED AMENDMENT	Permit unsprinklered 2-storey stacked townhouses of noncombustible construction in buildings up to 4 storeys in height.		

EXISTING BUILDING CODE PROVISIONS

3.2.2.44. Reserved

PROPOSED BUILDING CODE CHANGE

Replace Article 3.2.2.44. as follows:

3.2.2.44. Group C, up to 4 Storeys, Noncombustible Construction

(1) A *building* classified as Group C is permitted to conform to Sentence (2) provided,

(a) it is not more than

(i) 3 *storeys* in *building height*, or

(ii) 4 *storeys* in *building height* provided there is not more than one *dwelling unit* above another *dwelling unit*, and vertical *fire separations* of adjacent *dwelling units* conform to Sentence (4), and

(b) it has a *building area* not more than the value in Table 3.2.2.44.

Table 3.2.2.44.
Maximum Building Area, Group C, up to 4 Storeys
Forming Part of Sentence 3.2.2.44.(1)

No. of *Storeys*	Maximum Area, m^2		
	Facing 1 *Street*	Facing 2 *Streets*	Facing 3 *Streets*
1	not limited	not limited	not limited
2	6 000	not limited	not limited
3	4 000	5 000	6 000
4	3 000	3 750	4 500
Column 1	2	3	4

(2) The *building* referred to in Sentence (1) shall be of *noncombustible construction*, and,

(a) except as permitted by Sentence (3), floor assemblies shall be *fire separations* with a *fire-resistance rating* of not less than 1 h,

(b) *mezzanines* shall have a *fire-resistance rating* of not less than 1 h,

(c) roof assemblies shall have a *fire-resistance rating* not less than 1 h, and

(d) *loadbearing* walls, columns and arches shall have a *fire-resistance rating* not less than that required for the supported assembly.

(3) In a *building* that contains *dwelling units* that have more than 1 *storey*, subject to the requirements of Sentence 3.3.4.2.(3), the floor assemblies, including floors over *basements*, which are entirely contained within these *dwelling units*, shall have a *fire-resistance rating* not less than 1 h but need not be constructed as *fire separations*.

(4) The *dwelling units* described in Subclause (1)(a)(ii) shall be separated by continuous vertical *fire separations* that extend through all *storeys* and *service spaces* of the separated portions.

See Change Number B-03-03-02 for additional egress requirements applicable to stacked townhouses, in Article 3.3.4.4. of Division B.

A consequential revision to Sentence 3.2.1.4.(1) of Division B is shown underlined as follows:

(1) Except as permitted by Sentences 3.2.2.42.(3), 3.2.2.43.(3), 3.2.2.44.(3), 3.2.2.45.(3), 3.2.2.46.(3), 3.2.2.47.(3) or 3.2.2.48.(3), a floor assembly immediately above a basement shall be constructed as a fire separation having a fire-resistance rating conforming to the requirements of Articles 3.2.2.20. to 3.2.2.83. for a floor assembly, but not less than 45 min.

Rationale: PROBLEM	Certain unsprinklered stacked townhouse projects provide an adequate level of fire safety provided that • not more than one unit is above another unit • continuous vertical fire separations between the units are provided • each unit has its own separate exit • the building is not more than 4 storeys high
Rationale: JUSTIFICATION	Stacked townhouses are generally categorized as small residential buildings. The Code does not require sprinklering of small residential multi-unit buildings.
IMPACT	Encourages construction of affordable housing. Maintains current design, construction and enforcement practises.

OBJECTIVE BASED ANALYSIS OF THE CHANGED OR NEW PROVISION	
Provision	Division B, Sentence 3.2.2.44.(2)
Objectives	OP 1.2 fire or explosion impacting areas beyond its point of origin. OP 1.3 fire caused by collapse of physical elements due to a fire or explosion. OS 1.2 fire caused by fire or explosion impacting areas beyond its point of origin. OS 1.3 fire caused by the collapse of physical elements due to a fire or explosion.
Functional Statements	F02 To limit the severity and effects of fire or explosions. F03 To retard the effects of fire on areas beyond its point of origin. F04 To retard failure or collapse due to the effects of fire.
Provision	Division B, Sentence 3.2.2.44.(3)
Objectives	OP 1.2 fire or explosion impacting areas beyond its point of origin. OS 1.2 fire caused by fire or explosion impacting areas beyond its point of origin. OS 1.5 risk of injury due to fire caused by persons being delayed in or impeded from moving to a safe place during a fire emergency.
Functional Statements	F03 To retard the effects of fire on areas beyond its point of origin. F05 To retard the effects of fire on emergency egress facilities. F06 To retard the effects of fire on facilities for notification, suppression and emergency response.

OBJECTIVE BASED ANALYSIS OF THE CHANGED OR NEW PROVISION	
Provision	Division B, Sentence 3.2.1.4.(1).
Objectives	No change.
Functional Statements	No change.

February 2008	Proposed Technical Change: 2006 Building Code		
CHANGE NUMBER	B-03-02-03	CODE REFERENCE	Div B., 3.2.6.
DESCRIPTION OF PROPOSED AMENDMENT	Harmonize the requirements of Subsection 3.2.6. of Division B with the model National Building Code.		

EXISTING BUILDING CODE PROVISIONS

3.2.6. Additional Requirements for High Buildings

3.2.6.1. Application

(1) This Subsection applies to a *building*,
(a) of Group A, D, E or F *major occupancy* classification that is more than,
  (i) 36 m high, measured between *grade* and the floor level of the top *storey*, or
  (ii) 18 m high, measured between *grade* and the floor level of the top *storey*, and in which the cumulative or total *occupant load* on or above any *storey* above *grade*, other than the first *storey*, divided by 1.8 times the width in metres of all *exit* stairs at that *storey*, exceeds 300,
(b) containing a Group B *major occupancy* in which the floor level of the highest *storey* of that *major occupancy* is more than 18 m above *grade*,
(c) containing a *floor area* or part of a *floor area* located above the third *storey* designed or intended as a Group B, Division 2 or 3 *occupancy*, and
(d) containing a Group C *major occupancy* whose floor level is more than 18 m above *grade*.

3.2.6.2. Limits to Smoke Movement

(1) Except as permitted in Sentence 3.2.6.6.(2), a *building* to which this Subsection applies shall be designed in accordance with Sentences (2) to (4) and Articles 3.2.6.3. to 3.2.6.7. to limit the danger to occupants and fire fighters from exposure to smoke in a *building* fire.

(2) Except as provided in Articles 3.2.6.4. to 3.2.6.6., a *building* referred to in Sentence (1), shall be designed so that, during a period of 2 h after the start of a fire, all *floor areas* that are above the lowest *exit storey* will not contain more than 1% by volume of contaminated air from the fire floor, assuming an outdoor temperature equal to the January design temperature on a 2.5% basis determined in conformance with Supplementary Standard SB-1.

(3) Except as provided in Articles 3.2.6.4 and 3.2.6.6., a *building* referred to in Sentence (1), shall be designed so that during a period of 2 h after the start of a fire, the limit described in Sentence (2) on the movement of contaminated air into other *floor areas* is not exceeded in,
(a) each *exit* stair serving *storeys* above the lowest *exit level*, and
(b) each *exit* stair serving *storeys* below the lowest *exit level*.

(4) Except as provided in Articles 3.2.6.4. and 3.2.6.6., a *building* referred to in Sentence (1), shall be designed so that during a period of 2 h after the start of a fire, the limit described in Sentence (2) on the movement of contaminated air into other *floor areas* is not exceeded in a shaft that contains an elevator for use by fire fighters required by Article 3.2.6.9.

3.2.6.3. Areas of Refuge

(1) In a *building* of Group C *major occupancy* classification, the requirements of Sentence 3.2.6.2.(2) are waived in *buildings* where occupants above the *first storey* can enter and be safely accommodated in *floor areas* or parts of *floor areas* that are designated as areas of refuge on the plans and are identified as such in the *building*.

(2) Except as required in Sentence (3), the areas of refuge referred to in Sentence (1) shall be located on every fifth *storey*.

(3) The areas of refuge referred to in Sentence (1) shall be located on every storey if the *building* is more than 75 m high, measured between *grade* and the floor level of the top *storey*.

(4) The areas of refuge referred to in Sentence (1) shall,

(a) provide not less than 0.5 m^2 of floor space per ambulatory occupant and 1.5 m^2 of floor space per non-ambulatory occupant,

(b) have access corridors and doors leading to each designated part of a floor area on the same *storey* sufficient to provide 3.67 mm of width for every person who may have to use these passages to reach the designated part of a *floor area*,

(c) have access stairs from intervening *storeys* leading to each designated part of a *floor area* sufficient to provide 5.5 mm of width for every person who may have to use these stairs to reach the designated part of a *floor area*, and

(d) not contain more than 1% by volume of contaminated air from the fire floor during a period of 2 h after the start of a fire, assuming an outdoor temperature equal to the January design temperature on a 2.5% basis determined in conformance with Supplementary Standard SB-1.

3.2.6.4. Sprinklered Buildings

(1) The requirements of Sentences 3.2.6.2.(2) and (4), and Clause 3.2.6.2.(3)(a) are waived when a *building* is *sprinklered*, and,

(a) the sprinkler system is equipped with a water flow and supervisory signal system that will,

  (i) transmit automatically a waterflow signal directly to the fire department, or through an independent central station,

  (ii) transmit automatically other supervisory signals to a proprietary control centre or to an independent central station, and

  (iii) actuate a signal at the central alarm and control facility described in Article 3.2.6.12.,

(b) each stairway that serves *storeys* above the lowest *exit level* is vented to the outdoors at or near the bottom of the stair shaft,

(c) measures are taken to limit movement of smoke from a fire in a *floor area* below the lowest *exit storey* into upper *storeys*, and

(d) except for exhaust fans in kitchens, washrooms and bathrooms in *dwelling units*, and except for fans used for smoke venting in Article 3.2.6.10., air moving fans in a system that serves more than 2 *storeys* shall be designed and installed so that in the event of a fire these fans can be stopped by means of a manually operated switch at the central alarm and control facility.

3.2.6.5. Exception for Lower Buildings

(1) The requirements of Sentence 3.2.6.2.(2) are waived in a *building* of Group C *major occupancy* classification where,

(a) the *building* is not more than 75 m high measured between *grade* and the floor level of the top *storey*, and

(b) the number of occupants of *storeys* above *grade* is not more than 3.6 times the area in square metres of treads and landings in the *exit* stairs serving these *storeys*.

3.2.6.6. Residential Buildings

(1) The requirements of Sentences 3.2.6.2.(2) and (4) and Clause 3.2.6.2.(3)(a) are waived in a *building* of Group C *major occupancy* classification,

(a) where each *suite* above *grade* has direct access to an exterior balcony that conforms to the requirements of Sentence 3.3.1.7.(7),

(b) where each stairway that serves *storeys* above the lowest *exit level* is vented to the outdoors at or near the bottom of the stair shaft,

(c) where measures are taken to limit movement of smoke from a fire in a *floor area* below the lowest *exit storey* into upper *storeys*, and

(d) where, except for exhaust fans in kitchens, washrooms and bathrooms in *dwelling units*, air moving fans are

designed and installed so that in the event of a fire such fans can be stopped by means of a manually operated switch at the central alarm and control facility where the system serves more than 2 *storeys*.

(2) The requirements of Sentences 3.2.6.2.(2) and (3) are waived in a Group C *major occupancy* apartment *building*.

3.2.6.7. Connected Buildings

(1) If a *building* described in Sentence 3.2.6.1.(1) is connected to any other *building*, measures shall be taken to limit movement of contaminated air from one *building* into another during a fire.

3.2.6.8. Emergency Operation of Elevators

(1) Manual emergency recall shall be provided for all elevators serving *storeys* above the *first storey*.

(2) Key-operated switches for emergency recall described by Sentence (1) shall be provided in a conspicuous location at,
(a) each elevator lobby on the recall level, and
(b) the central alarm and control facility required in Article 3.2.6.12.

(3) In-car emergency service switches shall be provided in all elevator cars.

(4) Keys to operate the switches required by Sentences (2) and (3) shall be,
(a) provided in a suitably identified box conspicuously located on the outside of an elevator hoistway near the central alarm and control facility required by Article 3.2.6.12., and
(b) at the central alarm and control facility.

(5) Automatic emergency recall operation shall be provided for all elevators serving *storeys* above the *first storey* in unsprinklered *buildings*.

(6) The automatic emergency recall feature in Sentence (5) shall be actuated by,
(a) *smoke detectors* installed in each elevator lobby on each *storey*, or
(b) the *building* fire alarm system.
(See Appendix A.)

(7) *Smoke detectors* in Sentence (6) shall be designed as part of the *building* fire alarm system.

3.2.6.9. Elevator for Use by Fire Fighters

(1) At least one elevator shall be provided for use by fire fighters in conformance with Sentences (2) to (6).

(2) The elevator referred to in Sentence (1) shall have a usable platform area not less than 2.2 m^2 and shall be capable of carrying a load of 900 kg to the top floor that it serves from a landing on the *storey* containing the entrance for fire fighter access referred to in Articles 3.2.5.4. and 3.2.5.5. within 1 min.

(3) Except when Measure K of Supplementary Standard SB-4 is used, each elevator for use by fire fighters shall,
(a) be provided with a *closure* at each shaft opening so that the interlock mechanism remains mechanically engaged and electrical continuity is maintained in the interlock circuits and associated wiring is operational for a period of not less than 1 h when the assembly is subjected to the standard fire exposure described in CAN4-S104-M, "Fire Tests of Door Assemblies",
(b) be protected with a vestibule containing no *occupancy* and separated from the remainder of the *floor area* by a *fire separation* having a *fire-resistance rating* not less than 45 min, or
(c) be protected with a corridor containing no *occupancy* and separated from the remainder of the *building* by a *fire separation* having a *fire-resistance rating* not less than 1 h.

(4) Except as permitted in Sentence (5), an elevator referred to in Sentence (1) shall be capable of providing transportation from the *storey* containing the entrance for fire fighter access referred to in Articles 3.2.5.4. and 3.2.5.5. to every floor that is above *grade* in the *building* and that is normally served by the elevator system.

(5) If it is necessary to change elevators to reach any floor referred to in Sentence (4), the system shall be designed so that not more than one change of elevator is required when travelling to any floor in the *building* from the *storey* containing the entrance for fire fighter access referred to in Articles 3.2.5.4. and 3.2.5.5.

(6) Electrical conductors for the operation of the elevator referred to in Sentence (1) shall be,

(a) installed in *service spaces* conforming to Section 3.6. that do not contain other *combustible* material, or

(b) protected against exposure to fire from the service entrance of the emergency power supply, or the normal service entrance of the normal power supply, to the equipment served, to ensure operation for a period of 1 h when subjected to the standard fire exposure described in CAN4-S101-M, "Fire Endurance Tests of Building Construction and Materials".

3.2.6.10. Venting to Aid Fire Fighting

(1) Means of venting each *floor area* to the outdoors shall be provided by windows, wall panels or smoke shafts, except that in a *sprinklered floor area*, the *floor area* is permitted to be vented by the *building* exhaust system.

(2) Venting described in Sentence (1) shall conform to the requirements in Supplementary Standard SB-4.

(3) Fixed glass windows shall not be used for the venting required by Sentence (1) if the breaking of the windows could endanger pedestrians below.

(4) Openable windows used for the venting required by Sentence (1) shall be permanently marked so that they are easily identifiable.

(5) Elevator hoistways shall not be designed for the venting required by Sentence (1).

3.2.6.11. Reserved

3.2.6.12. Central Alarm and Control Facility

(1) A central alarm and control facility shall be provided on the *storey* containing the entrance for fire fighter access referred to in Articles 3.2.5.4. and 3.2.5.5. in a location that,

(a) is readily accessible to fire fighters entering the *building*, and

(b) takes into account the effect of background noise likely to occur under fire emergency conditions, so that the facility can properly perform its required function under such conditions.

(2) The central alarm and control facility required in Sentence (1) shall include,

(a) means to control the voice communication system required by Article 3.2.6.13., so that messages can be sent to,

  (i) all loudspeakers simultaneously,

  (ii) to individual *floor areas*, and

  (iii) *exit* stairwells,

(b) means to indicate audibly and visually *alert signals* and *alarm signals* and a switch to,

  (i) silence the audible portion of these signals, and

  (ii) indicate visually that the audible portion has been silenced,

(c) means to indicate visually that elevators are on emergency recall,

(d) an annunciator conforming to Article 3.2.4.8.,

(e) means to transmit *alert signals* and *alarm signals* to the fire department in conformance with Article 3.2.4.7.,

(f) means to release hold-open devices on doors to vestibules,

(g) means to manually actuate *alarm signals* in the *building* selectively to any zone or zones,

(h) means to silence the *alarm signals* referred to in Clause (g) in conformance with Sentences 3.2.4.22.(2) and (3),

(i) means, as appropriate to the measure for fire safety provided in the *building*, to,
  (i) actuate auxiliary equipment, or
  (ii) communicate with a continually staffed auxiliary equipment control centre,
(j) means to communicate with telephones in elevator cars, separate from connections to fire fighters' telephones, if elevator cars are required by the *Elevating Devices Act* to be equipped with a telephone,
(k) means to indicate visually, individual sprinkler system waterflow signals,
(l) means to indicate audibly and visually, sprinkler system supervisory signals,
(m) a switch to silence the audible portion of a supervisory signal, and
(n) visual indication that the audible portion of a supervisory signal has been silenced.

3.2.6.13. Voice Communication System

(1) A voice communication system or systems conforming to Article 3.2.4.22. shall be provided in a *building* if,
(a) the floor of the top *storey*, is more than 36 m above *grade*, or
(b) a *floor area* or part of a *floor area* located above the third *storey* is designed or intended for use as a Group B, Division 2 or 3 *occupancy*.

3.2.6.14. Testing

(1) The systems for control of smoke movement and mechanical venting required by Articles 3.2.6.2. and 3.2.6.10. shall be tested to ensure satisfactory operation in accordance with the procedures described in Supplementary Standard SB-4.

PROPOSED BUILDING CODE CHANGE

Delete Subsection 3.2.6. and replace with the following:

3.2.6. Additional Requirements for High Buildings

3.2.6.1. Application

(1) This Subsection applies to a *building*,
(a) of Group A, D, E or F *major occupancy* classification that is more than,
  (i) 36 m high, measured between *grade* and the floor level of the top *storey*, or
  (ii) 18 m high, measured between *grade* and the floor level of the top *storey*, and in which the cumulative or total *occupant load* on or above any *storey* above *grade*, other than the first *storey*, divided by 1.8 times the width in metres of all *exit* stairs at that *storey*, exceeds 300,
(b) containing a Group B *major occupancy* in which the floor level of the highest *storey* of that *major occupancy* is more than 18 m above *grade*,
(c) containing a *floor area* or part of a *floor area* located above the third *storey* designed or intended as a Group B, Division 2 or 3 *occupancy*, and
(d) containing a Group C *major occupancy* whose floor level is more than 18 m above *grade*.

3.2.6.2. Limits to Smoke Movement

(1) A *building* to which this Subsection applies shall be designed in accordance with Sentences (2) to (5) and Article 3.2.6.3. to limit the danger to occupants and fire fighters from exposure to smoke in a *building* fire.

(2) A *building* referred to in Sentence (1), shall be designed so that, during a period of 2 h after the start of a fire, each *exit* stair serving *storeys* below the lowest *exit level* will not contain more than 1% by volume of contaminated air from the fire floor, assuming an outdoor temperature equal to the January design temperature on a 2.5% basis determined in conformance with Supplementary Standard SB-1.

(3) Each stairway that serves *storeys* below the lowest *exit level* shall have a vent to the outdoors, at or near the

bottom of the stair shaft, that

(a) has an openable area of 0.05 m^2 for every door between the stair shaft and a *floor area*, but not less than 1.8 m^2,

(b) opens directly to the outdoors or into a vestibule that has a similar opening to the outdoors, and

(c) has a door or *closure* that

  (i) is openable manually, and

  (ii) can remain in the open position during a fire emergency.

(4) Measures are taken to limit movement of smoke from a fire in a *floor area* below the lowest *exit storey* into upper *storeys*.

(5) Except for exhaust fans in kitchens, washrooms and bathrooms in *dwelling units*, and except for fans used for smoke venting as required by Article 3.2.6.6., air moving fans in a system that serves more than 2 *storeys* shall be designed and installed so that in the event of a fire these fans can be stopped by means of a manually operated switch at the central alarm and control facility.

3.2.6.3. Connected Buildings

(1) If a *building* described in Sentence Article 3.2.6.1. is connected to any other *building*, measures shall be taken to limit movement of contaminated air from one *building* into another during a fire.

3.2.6.4. Emergency Operation of Elevators

(1) Manual emergency recall shall be provided for all elevators serving *storeys* above the *first storey*.

(2) Key-operated switches for emergency recall described by Sentence (1) shall be provided in a conspicuous location at

(a) each elevator lobby on the recall level, and

(b) the central alarm and control facility required in Article 3.2.6.7.

(3) In-car emergency service switches shall be provided in all elevator cars.

(4) Keys to operate the switches required by Sentences (2) and (3) shall be

(a) provided in a suitably identified box conspicuously located on the outside of an elevator hoistway near the central alarm and control facility required by Article 3.2.6.7., and

(b) kept at the central alarm and control facility.

3.2.6.5. Elevator for Use by Fire Fighters

(1) At least one elevator shall be provided for use by fire fighters in conformance with Sentences (2) to (6).

(2) The elevator referred to in Sentence (1) shall have a useable platform area not less than 2.2 m^2 and shall be capable of carrying a load of 900 kg to the top floor that it serves from a landing on the *storey* containing the entrance for fire fighter access referred to in Articles 3.2.5.4. and 3.2.5.5. within 1 min.

(3) Each elevator for use by fire fighters shall,

(a) be provided with a *closure* at each shaft opening so that the interlock mechanism remains mechanically engaged and electrical continuity is maintained in the interlock circuits and associated wiring for a period of not less than 1 h when the assembly is subjected to the standard fire exposure described in CAN4-S104-M, "Fire Tests of Door Assemblies",

(b) be protected with a vestibule containing no *occupancy* and separated from the remainder of the *floor area* by a *fire separation* having a *fire-resistance rating* not less than 45 min, or

(c) be protected with a corridor containing no *occupancy* and separated from the remainder of the *building* by a *fire separation* having a *fire-resistance rating* not less than 1 h.

(4) Except as permitted in Sentence (5), an elevator referred to in Sentence (1) shall be capable of providing transportation from the *storey* containing the entrance for fire fighter access referred to in Articles 3.2.5.4. and 3.2.5.5. to every floor that is above *grade* in the *building* and that is normally served by the elevator system.

(5) If it is necessary to change elevators to reach any floor referred to in Sentence (4), the system shall be designed so that not more than one change of elevator is required when travelling to any floor in the *building* from the *storey* containing the entrance for fire fighter access referred to in Articles 3.2.5.4. and 3.2.5.5.

(6) Electrical conductors for the operation of the elevator referred to in Sentence (1) shall be,

(a) installed in *service spaces* conforming to Section 3.6. that do not contain other *combustible* material, or

(b) protected against exposure to fire from the service entrance of the emergency power supply, or the normal service entrance of the normal power supply, to the equipment served, to ensure operation for a period of 1 h when subjected to the standard fire exposure described in CAN/ULC-S101-M, "Fire Endurance Tests of Building Construction and Materials".

3.2.6.6. Venting to Aid Fire Fighting

(1) Means of venting each *floor area* to the outdoors shall be provided by windows, wall panels, smoke shafts or the *building* exhaust system.

(2) Fixed glass windows shall not be used for the venting required by Sentence (1) if the breaking of the windows could endanger pedestrians below.

(3) Openable windows used for the venting required by Sentence (1) shall be permanently marked so that they are easily identifiable.

(4) Elevator hoistways shall not be designed for the venting required by Sentence (1).

3.2.6.7. Central Alarm and Control Facility

(1) A central alarm and control facility shall be provided on the *storey* containing the entrance for fire fighter access referred to in Articles 3.2.5.4. and 3.2.5.5. in a location that

(a) is readily accessible to fire fighters entering the *building*, and

(b) takes into account the effect of background noise likely to occur under fire emergency conditions, so that the facility can properly perform its required function under such conditions.

(2) The central alarm and control facility required in Sentence (1) shall include

(a) means to control the voice communication system required by Article 3.2.6.8., so that messages can be sent to
  (i) all loudspeakers simultaneously,
  (ii) individual *floor areas*, and
  (iii) *exit* stairwells,

(b) means to indicate audibly and visually *alert signals* and *alarm signals* and a switch to
  (i) silence the audible portion of these signals, and
  (ii) indicate visually that the audible portion has been silenced,

(c) means to indicate visually that elevators are on emergency recall,

(d) an annunciator conforming to Article 3.2.4.8.,

(e) means to transmit *alert signals* and *alarm signals* to the fire department in conformance with Article 3.2.4.7.,

(f) means to release hold-open devices on doors to vestibules,

(g) means to manually actuate *alarm signals* in the *building* selectively to any zone or zones,

(h) means to silence the *alarm signals* referred to in Clause (g) in conformance with Sentences 3.2.4.22.(2) and (3),

(i) means, as appropriate to the measure for fire safety provided in the *building*, to,
  (i) actuate auxiliary equipment, or
  (ii) communicate with a continually staffed auxiliary equipment control centre,

(j) means to communicate with telephones in elevator cars, separate from connections to fire fighters' telephones, if elevator cars are required by the *Elevating Devices Act* to be equipped with a telephone,

(k) means to indicate visually, individual sprinkler system waterflow signals,

(l) means to indicate audibly and visually, sprinkler system supervisory signals and trouble signals,
(m) a switch to silence the audible portion of a supervisory signal or a trouble signal, and
(n) visual indication that the audible portion of a supervisory signal or a trouble signal has been silenced.

3.2.6.8. Voice Communication System

(1) A voice communication system or systems conforming to Article 3.2.4.22. shall be provided in a *building* if
(a) the floor of the top *storey*, is more than 36 m above *grade*, or
(b) a *floor area* or part of a *floor area* located above the third *storey* is designed or intended for use as a Group B, Division 2 or 3 *occupancy*.

3.2.6.9. Testing

(1) The systems for control of smoke movement and mechanical venting required by Articles 3.2.6.2. and 3.2.6.6. shall be tested to ensure satisfactory operation in accordance with the procedures described in Supplementary Standard SB-4.

Note: Subject to the public consultation process, corresponding changes to Suppmentary Standard SB-4 Measures for Fire Safety in High Buildings will be made in future.

Rationale: PROBLEM	Further improve the safety of new residential buildings higher than 6 storeys.
Rationale: JUSTIFICATION	Enhance the fire safety of Ontarians living and working in residential buildings by harmonizing the requirements for fire sprinkler systems with the model National Building Code.
IMPACT	Increased safety for occupants of residential buildings. Better harmonization of building codes across Canada. Increased capital costs of $\$15/m^2$ - $\$40/m^2$ Increased maintenance costs.

OBJECTIVE BASED ANALYSIS OF THE CHANGED OR NEW PROVISION	
Provision	3.2.6.2.(1)
Objectives	OP1.2 fire caused by fire or explosion impacting areas beyond its point of origin. OS1.2 fire caused by fire or explosion impacting areas beyond its point of origin. OS1.5 fire caused by persons being delayed in or impeded from moving to a safe place during a fire emergency.
Functional Statements	F02 To limit the severity and effects of fire or explosions.

OBJECTIVE BASED ANALYSIS OF THE CHANGED OR NEW PROVISION	
Provision	3.2.6.2.(2)
Objectives	OP1.2 fire caused by fire or explosion impacting areas beyond its point of origin. OS1.2 fire caused by fire or explosion impacting areas beyond its point of origin. OS1.5 fire caused by persons being delayed in or impeded from moving to a safe place during a fire emergency.
Functional Statements	F05 To retard the effects of fire on emergency egress facilities. F06 To retard the effects of fire on facilities for notification, suppression and emergency response.

OBJECTIVE BASED ANALYSIS OF THE CHANGED OR NEW PROVISION	
Provision	3.2.6.2.(3)
Objectives	OP1.2 fire caused by fire or explosion impacting areas beyond its point of origin. OS1.2 fire caused by fire or explosion impacting areas beyond its point of origin. OS1.5 fire caused by persons being delayed in or impeded from moving to a safe place during a fire emergency.
Functional Statements	F05 To retard the effects of fire on emergency egress facilities. F06 To retard the effects of fire on facilities for notification, suppression and emergency response.

OBJECTIVE BASED ANALYSIS OF THE CHANGED OR NEW PROVISION	
Provision	3.2.6.2.(4)
Objectives	OP1.2 fire caused by fire or explosion impacting areas beyond its point of origin. OS1.2 fire caused by fire or explosion impacting areas beyond its point of origin. OS1.5 fire caused by persons being delayed in or impeded from moving to a safe place during a fire emergency.
Functional Statements	F03 To retard the effects of fire on areas beyond its point of origin.

OBJECTIVE BASED ANALYSIS OF THE CHANGED OR NEW PROVISION	
Provision	3.2.6.2.(5)
Objectives	OP1.2 fire caused by fire or explosion impacting areas beyond its point of origin. OS1.2 fire caused by fire or explosion impacting areas beyond its point of origin. OS1.5 fire caused by persons being delayed in or impeded from moving to a safe place during a fire emergency.
Functional Statements	F03 To retard the effects of fire on areas beyond its point of origin.

OBJECTIVE BASED ANALYSIS OF THE CHANGED OR NEW PROVISION	
Provision	3.2.6.3.(1)
Objectives	OP1.2 fire caused by fire or explosion impacting areas beyond its point of origin. OP3.1 fire caused by fire or explosion impacting areas beyond the building of origin. OS1.2 fire caused by fire or explosion impacting areas beyond its point of origin. OS1.5 fire caused by persons being delayed in or impeded from moving to a safe place during a fire emergency.
Functional Statements	F03 To retard the effects of fire on areas beyond its point of origin.

OBJECTIVE BASED ANALYSIS OF THE CHANGED OR NEW PROVISION	
Provision	3.2.6.4.(1)
Objectives	OP1.2 fire caused by fire or explosion impacting areas beyond its point of origin. OS1.2 fire caused by fire or explosion impacting areas beyond its point of origin. OS1.5 fire caused by persons being delayed in or impeded from moving to a safe place during a fire emergency.
Functional Statements	F12 To facilitate emergency response.

OBJECTIVE BASED ANALYSIS OF THE CHANGED OR NEW PROVISION	
Provision	3.2.6.4.(2)
Objectives	OP1.2 fire caused by fire or explosion impacting areas beyond its point of origin. OS1.2 fire caused by fire or explosion impacting areas beyond its point of origin. OS1.5 fire caused by persons being delayed in or impeded from moving to a safe place during a fire emergency.
Functional Statements	F12 To facilitate emergency response.

OBJECTIVE BASED ANALYSIS OF THE CHANGED OR NEW PROVISION	
Provision	3.2.6.4.(3)
Objectives	OP1.2 fire caused by fire or explosion impacting areas beyond its point of origin. OS1.2 fire caused by fire or explosion impacting areas beyond its point of origin. OS1.5 fire caused by persons being delayed in or impeded from moving to a safe place during a fire emergency.
Functional Statements	F12 To facilitate emergency response.

OBJECTIVE BASED ANALYSIS OF THE CHANGED OR NEW PROVISION	
Provision	3.2.6.4.(4)
Objectives	OP1.2 fire caused by fire or explosion impacting areas beyond its point of origin. OS1.2 fire caused by fire or explosion impacting areas beyond its point of origin. OS1.5 fire caused by persons being delayed in or impeded from moving to a safe place during a fire emergency.
Functional Statements	F12 To facilitate emergency response.

OBJECTIVE BASED ANALYSIS OF THE CHANGED OR NEW PROVISION	
Provision	3.2.6.5.(1)
Objectives	OP1.2 fire caused by fire or explosion impacting areas beyond its point of origin. OS1.2 fire caused by fire or explosion impacting areas beyond its point of origin. OS1.5 fire caused by persons being delayed in or impeded from moving to a safe place during a fire emergency.
Functional Statements	F06 To retard the effects of fire on facilities for notification, suppression and emergency response. F12 To facilitate emergency response.

OBJECTIVE BASED ANALYSIS OF THE CHANGED OR NEW PROVISION	
Provision	3.2.6.5.(2)
Objectives	OP1.2 fire caused by fire or explosion impacting areas beyond its point of origin. OS1.2 fire caused by fire or explosion impacting areas beyond its point of origin. OS1.5 fire caused by persons being delayed in or impeded from moving to a safe place during a fire emergency.
Functional Statements	F12 To facilitate emergency response.

OBJECTIVE BASED ANALYSIS OF THE CHANGED OR NEW PROVISION	
Provision	3.2.6.5.(3)
Objectives	OP1.2 fire caused by fire or explosion impacting areas beyond its point of origin. OS1.2 fire caused by fire or explosion impacting areas beyond its point of origin. OS1.5 fire caused by persons being delayed in or impeded from moving to a safe place during a fire emergency.
Functional Statements	F06 To retard the effects of fire on facilities for notification, suppression and emergency response.

OBJECTIVE BASED ANALYSIS OF THE CHANGED OR NEW PROVISION	
Provision	3.2.6.5.(4)
Objectives	OP1.2 fire caused by fire or explosion impacting areas beyond its point of origin. OS1.2 fire caused by fire or explosion impacting areas beyond its point of origin. OS1.5 fire caused by persons being delayed in or impeded from moving to a safe place during a fire emergency.
Functional Statements	F12 To facilitate emergency response.

OBJECTIVE BASED ANALYSIS OF THE CHANGED OR NEW PROVISION	
Provision	3.2.6.5.(5)
Objectives	OP1.2 fire caused by fire or explosion impacting areas beyond its point of origin. OS1.2 fire caused by fire or explosion impacting areas beyond its point of origin. OS1.5 fire caused by persons being delayed in or impeded from moving to a safe place during a fire emergency.
Functional Statements	F12 To facilitate emergency response.

OBJECTIVE BASED ANALYSIS OF THE CHANGED OR NEW PROVISION	
Provision	3.2.6.5.(6)
Objectives	OP1.2 fire caused by fire or explosion impacting areas beyond its point of origin. OS1.2 fire caused by fire or explosion impacting areas beyond its point of origin. OS1.5 fire caused by persons being delayed in or impeded from moving to a safe place during a fire emergency.
Functional Statements	F06 To retard the effects of fire on facilities for notification, suppression and emergency response.

OBJECTIVE BASED ANALYSIS OF THE CHANGED OR NEW PROVISION	
Provision	3.2.6.6.(1)
Objectives	OP1.2 fire caused by fire or explosion impacting areas beyond its point of origin. OS1.2 fire caused by fire or explosion impacting areas beyond its point of origin. OS1.5 fire caused by persons being delayed in or impeded from moving to a safe place during a fire emergency.
Functional Statements	F06 To retard the effects of fire on facilities for notification, suppression and emergency response.

OBJECTIVE BASED ANALYSIS OF THE CHANGED OR NEW PROVISION	
Provision	3.2.6.5.(2)
Objectives	OS3.1 hazards caused by tripping, slipping, falling, contact, drowning or collision.
Functional Statements	F30 To minimize the risk of injury to persons as a result of tripping, slipping, falling, contact, drowning or collision.

OBJECTIVE BASED ANALYSIS OF THE CHANGED OR NEW PROVISION	
Provision	3.2.6.6.(3)
Objectives	OP1.2 fire caused by fire or explosion impacting areas beyond its point of origin. OS1.2 fire caused by fire or explosion impacting areas beyond its point of origin. OS1.5 fire caused by persons being delayed in or impeded from moving to a safe place during a fire emergency.
Functional Statements	F12 To facilitate emergency response.

OBJECTIVE BASED ANALYSIS OF THE CHANGED OR NEW PROVISION	
Provision	3.2.6.6.(4)
Objectives	OS1.2 fire caused by fire or explosion impacting areas beyond its point of origin. OS1.5 fire caused by persons being delayed in or impeded from moving to a safe place during a fire emergency.
Functional Statements	F03 To retard the effects of fire on areas beyond its point of origin. F12 To facilitate emergency response.

OBJECTIVE BASED ANALYSIS OF THE CHANGED OR NEW PROVISION	
Provision	3.2.6.7.(1)
Objectives	OP1.2 fire caused by fire or explosion impacting areas beyond its point of origin. OS1.2 fire caused by fire or explosion impacting areas beyond its point of origin. OS1.5 fire caused by persons being delayed in or impeded from moving to a safe place during a fire emergency.
Functional Statements	F12 To facilitate emergency response.

OBJECTIVE BASED ANALYSIS OF THE CHANGED OR NEW PROVISION	
Provision	3.2.6.7.(2)
Objectives	OP1.2 fire caused by fire or explosion impacting areas beyond its point of origin. OS1.2 fire caused by fire or explosion impacting areas beyond its point of origin. OS1.5 fire caused by persons being delayed in or impeded from moving to a safe place during a fire emergency.
Functional Statements	F11 To notify persons, in a timely manner, of the need to take action in an emergency. F12 To facilitate emergency response.

OBJECTIVE BASED ANALYSIS OF THE CHANGED OR NEW PROVISION	
Provision	3.2.6.8.(1)
Objectives	OS3.7 hazards caused by persons being delayed in or impeded from moving to a safe place during an emergency.
Functional Statements	F12 To facilitate emergency response.

OBJECTIVE BASED ANALYSIS OF THE CHANGED OR NEW PROVISION	
Provision	3.2.6.9.(1)
Objectives	OP1.2 fire caused by fire or explosion impacting areas beyond its point of origin. OS1.2 fire caused by fire or explosion impacting areas beyond its point of origin. OS1.5 fire caused by persons being delayed in or impeded from moving to a safe place during a fire emergency.
Functional Statements	F82 To minimize the risk of inadequate performance due to improper maintenance or lack of maintenance.

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February 2008	Proposed Technical Change: 2006 Building Code		
CHANGE NUMBER	**B-03-03-01**	**CODE REFERENCE**	**Div. B, 3.3.4.2.(3)**
DESCRIPTION OF PROPOSED AMENDMENT	Harmonize the provisions for fire separations around multi level dwelling units in Sentence 3.3.4.2.(3) with the model National Building Code 2005.		

EXISTING BUILDING CODE PROVISIONS

3.3.4.2. Fire Separations

(3) Floor assemblies within a *dwelling unit* need not be constructed as *fire separations* provided,

(a) the distance between the lowest floor level and the uppermost floor level within the *dwelling unit* is not more than 6 m, and

(b) the *dwelling unit* is separated from the remainder of the *building* by a *fire separation* having a *fire-resistance rating* not less than,

- (i) 45 min if the *building* is *sprinklered* and is not more than 3 *storeys* in *building height*,
- (ii) 1 h if the *building* is *sprinklered* and is more than 3 *storeys* in *building height*,
- (iii) 1 h if the *building* is not *sprinklered* and is not more than 6 *storeys* in *building height*, or
- (iv) 2 h if the *building* is not *sprinklered* and is more than 6 *storeys* in *building height*.

PROPOSED BUILDING CODE CHANGE

Revise Clause 3.3.4.2.(3)(b) as follows:

(b) the *dwelling unit* is separated from the remainder of the *building* by a *fire separation* having a *fire-resistance rating* not less than,

- (i) 1 h if the *building* is not sprinklered,
- (ii) 45 min if the *building* is *sprinklered* and is not more than 3 *storeys* in *building height*, or
- (iii) 1 h if the *building* is *sprinklered* and is more than 3 *storeys* in *building height*.

Sentence 3.3.4.2.(3) is referenced in Div. B, Sentences 3.2.2.42.(3), 3.2.2.43.(3), 3.2.2.44.(3), 3.2.2.45.(3), 3.2.2.46.(3), 3.2.2.47.(3), 3.2.2.48.(3), 3.2.8.1.(1)

Rationale: PROBLEM	The proposed amendments to Subsection 3.2.2. applicable to sprinklered multi-unit residential buildings make the requirements of Subclause 3.3.4.2.(3)(b) redundant.
Rationale: JUSTIFICATION	The proposed amendments to Subsection 3.2.2. ensure that all new multi-unit residential buildings between 3 and 6 storeys in height will be sprinklered. The provisions for fire separations around multi level dwelling units can be harmonized with the model National Building Code.
IMPACT	Better harmonization of building codes across Canada.

OBJECTIVE BASED ANALYSIS OF THE CHANGED OR NEW PROVISION	
Provision	Division B, Sentence 3.3.4.2.(3)
Objectives	No change
Functional Statements	No change

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February 2008	Proposed Technical Change: 2006 Building Code		
CHANGE NUMBER	B-03-03-02	CODE REFERENCE	Div. B, 3.3.4.4.
DESCRIPTION OF PROPOSED AMENDMENT	Require separated means of egress from each dwelling unit in 2-storey stacked townhouses of noncombustible construction in unsprinklered buildings up to 4 storeys in height.		

EXISTING OBC PROVISIONS

3.3.4.4. Egress from Dwelling Units

(1) Single *storey dwelling units* in an apartment *building* need not lead to a *public corridor* or exterior passageway on the same *storey* provided the *dwelling units* are served by private stairways leading directly to a public *access to exit* on the *storey*,

(a) immediately above, and

(b) immediately below.

(2) Except as permitted by Sentences (3) to (5), a *dwelling unit* containing more than one *storey* shall have an *exit* door or an egress door opening directly into a public *access to exit* from the uppermost *storey* and from the lowest *storey* of the *dwelling unit* so that each *storey* is served by an *exit* or egress door located not more than 1 500 mm above or below its floor level.

(3) A single *exit* is permitted from a *dwelling unit* provided the *exit* is an exterior doorway not more than 1 500 mm above adjacent ground level and,

(a) it is not necessary to travel up or down more than one *storey* to reach the *exit* door, or

(b) the uppermost floor level opens to a balcony not more than 6 m above adjacent ground level.

(4) An egress door from either the uppermost *storey* or the lowest *storey* in a *dwelling unit*, as required in Sentence (2), need not be provided,

(a) if that *storey* is served by a stairway that,

  (i) leads to a public *access to exit*,

  (ii) has no direct access to any other *storey* in the *dwelling unit*, and

  (iii) is separated from the other *storeys* in the *dwelling unit* by a *fire separation* having a *fire-resistance rating* of not less than 45 min,

(b) if the *dwelling unit* has not more than 2 *storeys* above the first *storey* of the *building*, or

(c) if it is not necessary to travel either more than 18 m, or more than 1 *storey* up or down to reach the egress door.

(5) An egress door from either the uppermost *storey* or the lowest *storey* in a *dwelling unit*, as required in Sentence (2), need not be provided,

(a) on the uppermost *storey* of a *dwelling unit* having not more than 2 *storeys* above the *first storey* of the *building*,

(b) on each *storey* from which it is not necessary to travel either more than 18 m or more than 1 *storey* up or down within the *dwelling unit* to reach an egress door, or

(c) where that *storey* is,

  (i) provided with a balcony conforming to Sentence (8),

  (ii) not more than 2 *storeys* above or below the *dwelling unit* egress door, and

  (iii) in a *building* that is not more than 6 *storeys* in *building height*.

(6) In a *building* of *residential occupancy* not more than 3 *storeys* in *building height*, a doorway from a *dwelling unit* is permitted to open directly into an *exit* stairway provided the *dwelling unit* has a second and separate *means of egress*.

(7) If a *dwelling unit* has a second and separate *means of egress*, one *means of egress* from a *dwelling unit* is permitted to pass through,

(a) an interior corridor served by a single *exit*,

(b) an exterior balcony served by a single *exit* stairway, or

(c) an exterior passageway served by a single *exit* stairway.

(8) Where a balcony is provided to meet the requirements of Sentence (3) or (5), the balcony shall have,

(a) a solid floor having a *fire-resistance rating* not less than that required for a floor assembly between *suites*, and

(b) an area providing not less than 1.5 m^2 per *suite* occupant, based on *occupant load*, and a minimum dimension of 1 200 mm.

PROPOSED OBC CHANGE

Add new Sentence 3.3.4.4.(9) as follows:

(9) Each *dwelling unit* in a *building* conforming to Subclause 3.2.2.44.(1)(a)(ii) shall be served by

(a) a direct *exit* that is an exterior doorway located not more than 1 500 mm of adjacent ground level, or

(b) a stairway that

(i) leads to an exterior doorway not more than 1 500 mm above adjacent ground level,

(ii) has no access to another *dwelling unit*, and

(iii) is separated from the remainder of the *building* with a *fire separation* having a *fire-resistance rating* of not less than 1 hour.

Consequential editorial revisions to Article 3.3.4.4. of Division B are shown underlined as follows:

(1) Except as required by Sentence (9), single *storey dwelling units* in an apartment *building* need not lead to a public corridor or exterior passageway on the same *storey* provided the dwelling units are served by private stairways leading directly to a public *access to exit* on the *storey*,

(a) immediately above, and

(b) immediately below.

(2) Except as required by Sentence (9) and permitted by Sentences (3) to (5), a *dwelling unit* containing more than one *storey* shall have an *exit* door or an egress door opening directly into a public *access to exit* from the uppermost *storey* and from the lowest *storey* of the *dwelling unit* so that each *storey* is served by an *exit* or egress door located not more than 1 500 mm above or below its floor level.

(4) An egress door from either the uppermost *storey* or the lowest *storey* in a *dwelling unit*, as required in Sentence (2), need not be provided,

(a) except as required by Sentence (9), ~~if~~ that *storey* is served by a stairway that,

(i) leads to a public *access to exit*,

(ii) has no direct access to any other *storey* in the *dwelling unit*, and

(iii) is separated from the other *storeys* in the *dwelling unit* by a *fire separation* having a *fire-resistance rating* of not less than 45 min,

(b) if the *dwelling unit* has not more than 2 *storeys* above the first *storey* of the *building*, or

(c) if it is not necessary to travel either more than 18 m, or more than 1 *storey* up or down to reach the egress door.

A consequential editorial revision to Sentence 3.3.1.3.(8) of Division B is shown underlined as follows:

(8) Except as required by 3.3.4.4.(9) and permitted by Sentences 3.3.4.4.(6) and (7), each *suite* in a *floor area* that contains more than one *suite* shall have,

(a) an exterior *exit* doorway, or

(b) a doorway,

(i) into a *public corridor*, or

(ii) to an exterior passageway.

A consequential editorial revision to Sentence 3.4.2.1.(4) of Division B is shown underlined as follows:

(4) The requirements of Sentences (1) and (2) are permitted to be waived for *dwelling units* having *access to exit* conforming to Sentences 3.3.4.4.(1) to (4) and (9).

Rationale: PROBLEM	Certain unsprinklered stacked townhouse projects provide an adequate level of fire safety provided that 1. not more than one unit is above another unit 2. continuous vertical fire separations between the units are provided 3. each unit has its own separate exit 4. the building is not more than 4 storeys high
Rationale: JUSTIFICATION	Stacked townhouses are generally categorized as small residential buildings. The Building Code does not require sprinklering of small residential multi-unit buildings provided that each dwelling unit has a separate entrance close to ground level.
IMPACT	Encourages construction of affordable housing. Maintains current design, construction and enforcement practises.

OBJECTIVE BASED ANALYSIS OF THE CHANGED OR NEW PROVISION	
Provision	Division B, Sentence 3.3.4.4.(9)
Objectives	OS3.7 persons being delayed in or impeded from moving to a safe place during an emergency
Functional Statements	F05 To retard the effects of fire on emergency egress facilities. F10 To facilitate the timely movement of persons to a safe place in an emergency.

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February 2008	Proposed Technical Change: 2006 Building Code		
CHANGE NUMBER	**B-11-04-01**	**CODE REFERENCE**	**Div. B, 11.4.2.3.**
DESCRIPTION OF PROPOSED AMENDMENT	Define that the performance level of a building over 3 storeys is reduced in the case of a change in the major occupancy to Group C.		

EXISTING OBC PROVISIONS

None.

PROPOSED OBC CHANGE

Add new Sentence 11.4.2.3.(6) as follows:

11.4.2.3. Change of Major Occupancy

(6) The *performance level* of an existing *building* is reduced where proposed construction will result in, the change of the *major occupancy* of all or part of an existing *building* to a C *major occupancy* in a *building* over three storeys in *building height* except in a *building* conforming to Subclause 3.2.2.44.(1)(a)(ii) and having an egress facility conforming to Sentence 3.3.4.4.(5).

A consequential revision to Sentence 11.4.2.3.(1) of Division B is shown underlined as follows:

(1) Except as required in Sentence 11.4.2.5.(4), the *performance level* of an existing *building* is reduced where proposed *construction* will result in,

(a) except as provided in Sentence 11.4.2.3.(6), the change of the *major occupancy* of all or part of an existing *building* to another *major occupancy* of a greater *hazard index*,

(b) the conversion of a *suite* of a Group C *major occupancy* into more than one *suite* of Group C *major occupancy*,

(c) a *suite* or part of a *suite* of a Group A, Division 2 or a Group A, Division 4 *major occupancy* is converted to a *gaming premises*,

(d) the change of a *farm building* or part of a *farm building* to a *major occupancy*,

(e) the change of a *building* or part of a *building* is to a *post-disaster building*, or

(f) the change in use of a *building* or part of a *building* where the previous *major occupancy* of the *building* or part of the *building* cannot be determined.

Rationale: PROBLEM	Further improve the safety of existing residential buildings higher than 3 storeys that undergo a change of major occupancy to Group C..
Rationale: JUSTIFICATION	Enhance the fire safety of Ontarians living and working in residential buildings with requirements for fire sprinkler systems in existing building over 3 storeys that undergo a change in the major occupancy to Group C.
IMPACT	Increased safety for occupants of residential buildings. Increased capital costs of $\$15/m^2$ - $\$40/m^2$ Increased maintenance costs.

OBJECTIVE BASED ANALYSIS OF THE CHANGED OR NEW PROVISION	
Provision	Division C, Sentence 11.4.2.3.(6)
Objectives	Not applicable
Functional Statements	Not applicable

February 2008	Proposed Technical Change: 2006 Building Code		
CHANGE NUMBER	**B-11-04-02**	**CODE REFERENCE**	**Div. B, 11.4.3.4.**
DESCRIPTION OF PROPOSED AMENDMENT	Require sprinklering of floor areas in an existing building that undergo a change of major occupancy to Group C.		

EXISTING OBC PROVISIONS

None.

PROPOSED OBC CHANGE

Add new Sentence 11.4.3.4.(6) as follows:

(6) Where the *performance level* is reduced under Sentence 11.4.2.3.(6) the *storey* subject to the change shall be *sprinklered*.

Rationale: PROBLEM	Further improve the safety of existing residential buildings higher than 3 storeys that undergo a change of major occupancy to Group C.
Rationale: JUSTIFICATION	Enhance the fire safety of Ontarians living and working in residential buildings with requirements for fire sprinkler systems in existing building over 3 storeys that undergo a change in the major occupancy to Group C.
IMPACT	Increased safety for occupants of residential buildings. Increased capital costs of $\$15/m^2$ - $\$40/m^2$ Increased maintenance costs.

OBJECTIVE BASED ANALYSIS OF THE CHANGED OR NEW PROVISION	
Provision	Division B, Sentence 11.4.3.4.(6)
Objectives	Not applicable
Functional Statements	Not applicable

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Appendix B: Proposed On-Site Sewage System Re-inspection and Area Bed Amendments

CHANGE NUMBER	DESCRIPTION
A-01-04-02	Add new definition of "Area Bed" to Clause 1.4.1.2.(1)(b) of Division A.
B-08-06-01	Revise existing Sentence 8.6.2.2.(2) of Division B to regulate the effluent from treatment units discharging to area beds.
B-08-07-01	Provide requirements for area beds by adding a new Subsection 8.7.7. "Area Bed" in Division B.
B-08-09-01	Editorial - Revise title of Article 8.9.2.4. of Division B to include area beds.
C-01-03-01	Editorial - Orders
C-01-10-01	Add new Subsection 1.10., Sewage System Maintenance Programs, in Division C.
C-03-01-01	Add qualifications for persons carrying out sewage system maintenance inspections.
C-03-01-02	Editorial - Qualifications for sewage system maintenance program inspectors.

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February 2008	Proposed Technical Change: 2006 Building Code		
CHANGE NUMBER	A-01-04-02	CODE REFERENCE	Div. A, 1.4.1.2.(1)
DESCRIPTION OF PROPOSED AMENDMENT	Add new definition of "*Area Bed*" to Clause 1.4.1.2.(1)(b) of Division A.		

EXISTING BUILDING CODE PROVISIONS

None.

PROPOSED BUILDING CODE CHANGE

Add new definition of "*area bed*" to Clause 1.4.1.2.(1)(b) as follows:

Area bed means a *leaching bed* that receives tertiary treated effluent from a *treatment unit* and is comprised, in part, of a stone layer and an unsaturated sand layer and a

(a) distribution system comprised of a series of *distribution pipes* installed in a layer of septic stone, or

(b) stone layer with a distribution system designed to distribute the *effluent* evenly over a stone layer.

Rationale: PROBLEM	Area beds are a soil absorption system used in conjunction with an on-site sewage system that includes a tertiary treatment unit listed in Supplementary Standards SB-5 to the Building Code. Area beds are designed to further treat and disperse effluent within the soil. They are comprised of a stone layer situated on top of a sand layer and may be installed in or on soil. The Building Code does not currently contain specific requirements relating to the design and construction of area bed systems.
Rationale: JUSTIFICATION	The scope of the Building Code's requirements for the design and construction of on-site sewage systems would be expanded to establish requirements for area bed systems.
IMPACT	The Building Code would contain requirements relating to the design and construction of for area beds systems.

OBJECTIVE BASED ANALYSIS OF THE CHANGED OR NEW PROVISION	
Provision	Division A, Sentence 1.4.1.2.(1).
Objectives	Not Applicable.
Functional Statements	Not Applicable.

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February 2008	Proposed Technical Change: 2006 Building Code		
CHANGE NUMBER	B-08-06-01	CODE REFERENCE	Div. B, 8.6.2.2.(2)
DESCRIPTION OF PROPOSED AMENDMENT	Regulate the effluent from treatment units discharging to area beds.		

EXISTING BUILDING CODE PROVISIONS

8.6.2.2. Other Treatment Units

(2) A *treatment unit* that is used in conjunction with a *leaching bed constructed* as *shallow buried trenches* shall be designed such that the *effluent* does not exceed the maximum concentrations stipulated in Column 3 of Table 8.6.2.2.A..

PROPOSED BUILDING CODE CHANGE

Revise existing Sentence 8.6.2.2.(2) as follows:

(2) A *treatment unit* that is used in conjunction with a *leaching bed constructed* as *shallow buried trenches*, or *area bed* shall be designed such that the *effluent* does not exceed the maximum concentrations stipulated in Column 3 of Table 8.6.2.2.A..

Rationale: PROBLEM	Area beds are a soil absorption system used in conjunction with an on-site sewage system that includes a tertiary treatment unit listed in Supplementary Standards SB-5 to the Building Code. Area beds are designed to further treat and disperse effluent within the soil. They are comprised of a stone layer situated on top of a sand layer and may be installed in or on soil. The Building Code does not currently contain specific requirements relating to the design and construction of area bed systems.
Rationale: JUSTIFICATION	The scope of the Building Code's requirements for the design and construction of on-site sewage systems would be expanded to establish requirements for area bed systems.
IMPACT	The Building Code would contain requirements relating to the design and construction of for area beds systems.

OBJECTIVE BASED ANALYSIS OF THE CHANGED OR NEW PROVISION	
Provision	Division B, Sentence 8..6.2.2.(2)
Objectives	No change.
Functional Statements	No change.

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February 2008	Proposed Technical Change: 2006 Building Code		
CHANGE NUMBER	B-08-07-01	CODE REFERENCE	Div. B, 8.7.7.
DESCRIPTION OF PROPOSED AMENDMENT	Add requirements for the design and construction of area bed sewage systems.		

EXISTING BUILDING CODE PROVISIONS

None.

PROPOSED BUILDING CODE CHANGE

Add a new Subsection 8.7.7., "Area Bed" as follows:

8.7.7. Area Bed

8.7.7.1. General

(1) The design and installation of an *area bed* system shall be carried out by a person competent in this field of work.

8.7.7.2. Construction Requirements

(1) The *effluent* from a *treatment unit* used in conjunction with an *area bed* shall conform to Sentence 8.6.2.2.(2).

(2) The *area bed* shall be:
(a) rectangular in shape with the long dimension parallel to the site contours,
(b) located not more than 700 mm in depth measured from the bottom of the stone layer to the final grade when installed in *soil* with *percolation time* that exceeds 15 min/cm, and
(c) backfilled, after the installation with *leaching bed fill*, so as to ensure that after the *leaching bed fill* settles, the surface of the *leaching bed* will not form any depressions.

(3) The combined thickness of the sand layer and the stone layer shall be not less than 500 mm.

(4) The sand layer shall:
(a) be comprised of sand that has a *percolation time* between 6 and 10 min/cm,
(b) have a minimum depth of 250 mm, and
(c) have an area that is not less than the area of the stone layer above, and not less than the value determined by the following formula:

$$A = QT/850$$

where:

A = the area of contact in square metres between the base of the imported sand and the underlying *soil*.
Q = the total daily design *sanitary sewage* flow in litres.
T = the lesser of 50 and the *percolation time* of the underlying native *soil*.

(5) Where the native *soil* has a *percolation time* of more than 15 min/cm, the sand layer shall be extended to at least 15 m beyond the perimeter of the *treatment unit*, or *distribution pipes* if utilized, in any direction that the *effluent* entering the *soil* will move horizontally such that the total area covered by the sand is not less than the value calculated from the following formula:

$$A = QT/400$$

where:

A = the area of contact in square metres between the base of the imported sand and the *leaching bed fill* (if utilized) and the underlying *soil*.
Q = the total daily design *sanitary sewage* flow in litres.
T = the lesser of 50 and the *percolation time* of the underlying native *soil*.

(6) A *leaching bed fill* that has a *percolation time* that does not exceed 15 min/cm may be used to satisfy the extension of the sand layer required by Sentence (5).

(7) The stone layer shall:
(a) be comprised of a septic stone complying with clause 8.7.3.3.(5)(a),
(b) have a minimum depth of 200 mm, and a minimum area that is not less than the value calculated from the following formulas:

(i) A = Q/75, when the total daily design *sanitary sewage* flow does not exceed 3000 litres,
(ii) A = Q/50, when the total daily design *sanitary sewage* flow exceeds 3000 litres,

where:

A = the area of the stone layer in square metres.
Q = the total daily design *sanitary sewage* flow in litres,

(c) be protected in the manner described in Sentence 8.7.3.3.(2), and
(d) be *constructed* such that its bottom is vertically separated by at least 600 mm from the high ground water table, rock or *soil* with a *percolation time* of 6min/cm or less, or greater than 50 min/cm; except where the underlying *soil* has a *percolation time* of between 6 and 50 min/cm where this vertical separation may be reduced to 450 mm.

(8) The *effluent* shall be evenly distributed over the stone layer to within 600 mm of the perimeter edge of the stone layer by
(a) *distribution pipes* complying with Article 8.7.3.3., or
(b) a distribution system designed to achieve even distribution to within 600 mm of the perimeter edge of the stone layer.

(9) A *leaching bed fill* with a *percolation time* not exceeding 15 min/cm may be used to satisfy the vertical separation requirements of Clause (7)(b) provided that the added *fill* conforms to the requirements specified in Sentence (5) regardless of the T time of the native *soil*.

(10) Where there is more than one *area bed* in a *leaching bed*, the *area beds* shall be separated by at least 5 m measured from the edge of the stone layers.

(11) The stone layer shall not be located closer than the minimum horizontal distances set out in Table 8.2.1.6.B, and these distances shall be increased when required by Sentence 8.7.4.2.(11).

Rationale: PROBLEM	Area beds are a soil absorption system used in conjunction with an on-site sewage system that includes a tertiary treatment unit listed in Supplementary Standards SB-5 to the Building Code. Area beds are designed to further treat and disperse effluent within the soil. They are comprised of a stone layer situated on top of a sand layer and may be installed in or on soil. The Building Code does not currently contain specific requirements relating to the design and construction of area bed systems.
Rationale: JUSTIFICATION	The scope of the Building Code's requirements for the design and construction of on-site sewage systems would be expanded to establish requirements for area bed systems.
IMPACT	The Building Code would contain requirements relating to the design and construction of for area beds systems.

OBJECTIVE BASED ANALYSIS OF THE CHANGED OR NEW PROVISION	
Provision	Division B, Sentence 8.7.7.1.(1)
Objectives	Non-Requirement (Administrative Provision)
Functional Statements	Non-Requirement (Administrative Provision)

OBJECTIVE BASED ANALYSIS OF THE CHANGED OR NEW PROVISION	
Provision	Division B, Sentence 8.7.7.2.(1)
Objectives	Non-Requirement (Signpost to direct the Code user to another relevant code unit that would apply in any case.)
Functional Statements	Non-Requirement (Signpost to direct the Code user to another relevant code unit that would apply in any case.)

OBJECTIVE BASED ANALYSIS OF THE CHANGED OR NEW PROVISION	
Provision	Division B, Sentence 8.7.7.2.(2)
Objectives	OE An objective of this Code is to limit the probability that, as a result of the design, construction or operation of a building, the natural environment will be exposed to an unacceptable risk of degradation. OH2.1 An *objective* of this Code is to limit the probability that, as a result of the design or *construction* of a *building*, a person in the *building* will be exposed to an unacceptable risk of illness due to unsanitary conditions caused by exposure to human or domestic waste. OH5 An objective of this Code is to limit the probability that, as a result of the design or construction of a building, the public will be exposed to an unacceptable risk of illness due to the release of hazardous substances from the building.
Functional Statements	F110 To control the release of contaminants into *soil*, *groundwater*, *surface water* and air. F112 To provide adequate treatment of *sanitary sewage* and *effluent*.

OBJECTIVE BASED ANALYSIS OF THE CHANGED OR NEW PROVISION	
Provision	Division B, Sentence 8.7.7.2.(3)
Objectives	OE An objective of this Code is to limit the probability that, as a result of the design, construction or operation of a building, the natural environment will be exposed to an unacceptable risk of degradation. OH2.1 An *objective* of this Code is to limit the probability that, as a result of the design or *construction* of a *building*, a person in the *building* will be exposed to an unacceptable risk of illness due to unsanitary conditions caused by exposure to human or domestic waste. OH5 An objective of this Code is to limit the probability that, as a result of the design or construction of a building, the public will be exposed to an unacceptable risk of illness due to the release of hazardous substances from the building.
Functional Statements	F110 To control the release of contaminants into *soil*, *groundwater*, *surface water* and air. F111 To minimize the risk of malfunction, damage or failure of a *sewage system*. F112 To provide adequate treatment of *sanitary sewage* and *effluent*.

OBJECTIVE BASED ANALYSIS OF THE CHANGED OR NEW PROVISION	
Provision	Division B, Sentence 8.7.7.2.(4)
Objectives	OE An objective of this Code is to limit the probability that, as a result of the design, construction or operation of a building, the natural environment will be exposed to an unacceptable risk of degradation. OH2.1 An *objective* of this Code is to limit the probability that, as a result of the design or *construction* of a *building*, a person in the *building* will be exposed to an unacceptable risk of illness due to unsanitary conditions caused by exposure to human or domestic waste. OH5 An objective of this Code is to limit the probability that, as a result of the design or construction of a building, the public will be exposed to an unacceptable risk of illness due to the release of hazardous substances from the building.
Functional Statements	F110 To control the release of contaminants into *soil*, *groundwater*, *surface water* and air. F111 To minimize the risk of malfunction, damage or failure of a *sewage system*. F112 To provide adequate treatment of *sanitary sewage* and *effluent*.

OBJECTIVE BASED ANALYSIS OF THE CHANGED OR NEW PROVISION	
Provision	Division B, Sentence 8.7.7.2.(5)
Objectives	OE An objective of this Code is to limit the probability that, as a result of the design, construction or operation of a building, the natural environment will be exposed to an unacceptable risk of degradation. OH2.1 An *objective* of this Code is to limit the probability that, as a result of the design or *construction* of a *building*, a person in the *building* will be exposed to an unacceptable risk of illness due to unsanitary conditions caused by exposure to human or domestic waste. OH5 An objective of this Code is to limit the probability that, as a result of the design or construction of a building, the public will be exposed to an unacceptable risk of illness due to the release of hazardous substances from the building.
Functional Statements	F110 To control the release of contaminants into *soil*, *groundwater*, *surface water* and air. F111 To minimize the risk of malfunction, damage or failure of a *sewage system*.

OBJECTIVE BASED ANALYSIS OF THE CHANGED OR NEW PROVISION	
Provision	Division B, Sentence 8.7.7.2.(6)
Objectives	Non-Requirement (Clarification)
Functional Statements	Non-Requirement (Clarification)

OBJECTIVE BASED ANALYSIS OF THE CHANGED OR NEW PROVISION	
Provision	Division B, Sentence 8.7.7.2.(7)
Objectives	OE An objective of this Code is to limit the probability that, as a result of the design, construction or operation of a building, the natural environment will be exposed to an unacceptable risk of degradation. OH2.1 An *objective* of this Code is to limit the probability that, as a result of the design or *construction* of a *building*, a person in the *building* will be exposed to an unacceptable risk of illness due to unsanitary conditions caused by exposure to human or domestic waste. OH5 An objective of this Code is to limit the probability that, as a result of the design or construction of a building, the public will be exposed to an unacceptable risk of illness due to the release of hazardous substances from the building.
Functional Statements	F110 To control the release of contaminants into *soil*, *groundwater*, *surface water* and air. F111 To minimize the risk of malfunction, damage or failure of a *sewage system*.

OBJECTIVE BASED ANALYSIS OF THE CHANGED OR NEW PROVISION		
Provision	Division B, Sentence 8.7.7.2.(8)	
Objectives	OE	An objective of this Code is to limit the probability that, as a result of the design, construction or operation of a building, the natural environment will be exposed to an unacceptable risk of degradation.
	OH5	An objective of this Code is to limit the probability that, as a result of the design or construction of a building, the public will be exposed to an unacceptable risk of illness due to the release of hazardous substances from the building.
Functional Statements	F111	To minimize the risk of malfunction, damage or failure of a *sewage system*.

OBJECTIVE BASED ANALYSIS OF THE CHANGED OR NEW PROVISION		
Provision	Division B, Sentence 8.7.7.2.(9)	
Objectives	OE	An objective of this Code is to limit the probability that, as a result of the design, construction or operation of a building, the natural environment will be exposed to an unacceptable risk of degradation.
	OH2.1	An *objective* of this Code is to limit the probability that, as a result of the design or *construction* of a *building*, a person in the *building* will be exposed to an unacceptable risk of illness due to unsanitary conditions caused by exposure to human or domestic waste.
	OH5	An objective of this Code is to limit the probability that, as a result of the design or construction of a building, the public will be exposed to an unacceptable risk of illness due to the release of hazardous substances from the building.
Functional Statements	F110	To control the release of contaminants into *soil*, *groundwater*, *surface water* and air.
	F111	To minimize the risk of malfunction, damage or failure of a *sewage system*.

OBJECTIVE BASED ANALYSIS OF THE CHANGED OR NEW PROVISION		
Provision	Division B, Sentence 8.7.7.2.(10)	
Objectives	OE	An objective of this Code is to limit the probability that, as a result of the design, construction or operation of a building, the natural environment will be exposed to an unacceptable risk of degradation.
	OH2.1	An *objective* of this Code is to limit the probability that, as a result of the design or *construction* of a *building*, a person in the *building* will be exposed to an unacceptable risk of illness due to unsanitary conditions caused by exposure to human or domestic waste.
	OH5	An objective of this Code is to limit the probability that, as a result of the design or construction of a building, the public will be exposed to an unacceptable risk of illness due to the release of hazardous substances from the building.
Functional Statements	F110	To control the release of contaminants into *soil*, *groundwater*, *surface water* and air.
	F111	To minimize the risk of malfunction, damage or failure of a *sewage system*.

OBJECTIVE BASED ANALYSIS OF THE CHANGED OR NEW PROVISION	
Provision	Division B, Sentence 8.7.7.2.(11)
Objectives	OE An objective of this Code is to limit the probability that, as a result of the design, construction or operation of a building, the natural environment will be exposed to an unacceptable risk of degradation. OH2.1 An *objective* of this Code is to limit the probability that, as a result of the design or *construction* of a *building*, a person in the *building* will be exposed to an unacceptable risk of illness due to unsanitary conditions caused by exposure to human or domestic waste. OH5 An objective of this Code is to limit the probability that, as a result of the design or construction of a building, the public will be exposed to an unacceptable risk of illness due to the release of hazardous substances from the building.
Functional Statements	F110 To control the release of contaminants into *soil*, *groundwater*, *surface water* and air. F111 To minimize the risk of malfunction, damage or failure of a *sewage system*.

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February 2008	Proposed Technical Change: 2006 Building Code		
CHANGE NUMBER	B-08-09-01	CODE REFERENCE	Div. B, 8.9.2.4.
DESCRIPTION OF PROPOSED AMENDMENT	Set requirements for the operation and maintenance for area beds.		

EXISTING BUILDING CODE PROVISIONS

8.9.2.4. Shallow Buried Trenches

(1) Every person operating a *treatment unit* that is designed and *constructed* to produce *effluent* described in Column 3 of Table 8.6.2.2.A. shall, at the intervals described in Sentence (2),

(a) take a grab sample of the effluent to determine whether it complies with the levels contained in Column 3 of Table 8.6.2.2.A. for BOD_5 and suspended solids,

(b) carry out the sampling required by Clause (1)(a) in accordance with the methods described in the APHA/AWWA/WEF, "Standard Methods for the Examination of Water and Wastewater", and

(c) promptly submit the results of the sampling required by Clause (1)(a) to the *chief building official*.

(2) The sampling required by Clause (1)(a) shall be conducted,

(a) initially, once during the first 12 months after the *sewage system* was put into use, and

(b) thereafter, once during every 12 month period, at least 10 months and not more than 18 months after the previous sampling has been completed.

PROPOSED BUILDING CODE CHANGE

Revise title of Article 8.9.2.4. as follows:

8.9.2.4. Shallow Buried Trenches and Area Beds

Rationale: PROBLEM	Area beds are a soil absorption system used in conjunction with an on-site sewage system that includes a tertiary treatment unit listed in Supplementary Standards SB-5 to the Building Code. Area beds are designed to further treat and disperse effluent within the soil. They are comprised of a stone layer situated on top of a sand layer and may be installed in or on soil. The Building Code does not currently contain specific requirements relating to the design and construction of area bed systems.
Rationale: JUSTIFICATION	The scope of the Building Code's requirements for the design and construction of on-site sewage systems would be expanded to establish requirements for area bed systems.
IMPACT	The Building Code would contain requirements relating to the design and construction of for area beds systems.

OBJECTIVE BASED ANALYSIS OF THE CHANGED OR NEW PROVISION	
Provision	Division B, Sentence 8..6.2.2.(2)
Objectives	No change.
Functional Statements	No change.

February 2008	Proposed Technical Change: 2006 Building Code		
CHANGE NUMBER	C-01-03-01	CODE REFERENCE	Div. C, 1.3.5.6.(1)
DESCRIPTION OF PROPOSED AMENDMENT	Editorial revision re: Orders		

EXISTING BUILDING CODE PROVISIONS

1.3.5.6. Orders

(1) An order issued under subsection 12(2), 13(1), 13(6) or 14(1) or clause 18(1)(f) of the Act shall be in a form approved by the *Minister*.

PROPOSED BUILDING CODE CHANGE

Revise Sentence 1.3.5.6.(1) of Division C as follows:

(1) An order issued under subsection 12(2), 13(1), 13(6) or 14(1) or 15.10.1.(2) or clause 18(1)(f) of the Act shall be in a form approved by the *Minister*.

Rationale: PROBLEM	Inadequate or failing sewage systems are a potential threat to drinking water.
Rationale: JUSTIFICATION	These proposed amendments are part of a series of Building Code amendments: • Establishing sewage system maintenance inspection programs that principal authorities would be required to undertake in prescribed areas; and • Governing discretionary sewage system maintenance programs that principal authorities may establish elsewhere in their area of jurisdiction.
IMPACT	The proposed amendments related to sewage system maintenance inspections would have implications for principal authorities, property owners, sewage system manufacturers, installers and designers.

OBJECTIVE BASED ANALYSIS OF THE CHANGED OR NEW PROVISION	
Provision	Division C, Sentence 1.3.5.6.(1)
Objectives	Not applicable
Functional Statements	Not applicable

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February 2008	Proposed Technical Change: 2006 Building Code		
CHANGE NUMBER	C-01-10-01	CODE REFERENCE	Div. C, Part 1
DESCRIPTION OF PROPOSED AMENDMENT	Sewage system maintenance inspection programs		

EXISTING BUILDING CODE PROVISIONS

None.

PROPOSED BUILDING CODE CHANGE

Add new Section 1.10. and new Appendix Note A-1.10. as follows:

1.10. Sewage System Maintenance Programs

1.10.1. Mandatory Maintenance Inspection Programs

1.10.1.1. Scope and Application

(1) This Subsection establishes and governs, for the purposes of subsection 34(2.2) of the Act, a *maintenance inspection program* in respect of standards prescribed under clause 34(2)(b) of the Act in relation to *sewage systems*.

(2) This Subsection applies in an area within a *principal authority* for which a source protection plan made under the *Clean Water Act, 2006* is in effect.

(3) The *maintenance inspection program* established under this Subsection applies to all *sewage systems* [located in a defined area*].

* [Note: It is proposed that required maintenance inspection programs would apply to sewage systems located in prescribed areas. These areas are anticipated to be a subset of the "vulnerable areas" identified in an assessment report included in a source protection plan subject to posting on the environmental registry in accordance with section 30 of *Clean Water Act, 2006*. The method of delineating these areas will be set out in future technical rules under the Clean Water Act, 2006.]

1.10.1.2. Maintenance Inspection Programs

(1) Subject to Article 1.10.1.4. an *inspector* shall inspect the *sewage systems* described in Sentence 1.10.1.1.(3) for compliance with Section 8.9. of Division B.

(2) The inspection described in Sentence (1) shall include a site inspection of the *sewage system*.

(3) An *inspector* undertaking an inspection described in Sentence (1) may consider reports concerning whether the *sewage system* or a part of the *sewage system* complies with the Act or this Code.

1.10.1.3. Time Periods for Inspections

(1) The inspections required under Article 1.10.1.2. shall be undertaken,

(a) except as provided in Sentence (2), initially during the first 5 years after the first applicable source protection plan made under the *Clean Water Act, 2006* comes into effect, and

(b) thereafter, once during every 5 year period after the inspection described in Clause (1)(a) has been undertaken.

(2) The initial inspection required under Clause (1)(a) of the *sewage systems* described in Sentence (3) shall be undertaken initially during the first 3 years after the first applicable source protection plan made under the *Clean Water Act, 2006* comes into effect.

(3) The *sewage systems* referred to in Sentence (2) are *sewage systems* in respect of which:

(a) a permit has not been issued under section 8 of the Act, and

(b) an inspection under a *maintenance inspection program* established under clause 7(1)(b.1) of the Act has not been undertaken.

1.10.1.4. Certificate as Alternative to Inspection

(1) A *principal authority* may accept, as an alternative to conducting an inspection referred to in Sentence 1.10.1.2.(1), a certificate described in Sentence (2).

(2) The certificate referred to in Sentence (1) shall,

(a) be in a form approved by the *Minister*,

(b) confirm that the *sewage system* to which the certificate relates has been inspected and is in compliance with Section 8.9. of Division B, and

(c) be signed by a person who,

(i) is described in Sentence (3), and

(ii) conducted the inspection of the *sewage system* to which the certificate relates.

(3) Subject to Sentence (4), the persons referred to in Clause (2)(c) are,

(a) a person registered under Article 3.2.4.2. in the class of registration set out in Column 2 of Row 10 of Table 3.5.2.1., and

(b) a person registered under Article 3.3.3.2.

(4) A person shall not sign a certificate referred to in Sentence (1) if the person would be in a conflict of interest.

(5) For the purposes of Sentence (4), a person would be in a conflict of interest if the person or, where the person is a corporation or partnership, an officer, director, partner or employee of the person, or any person engaged by the person to perform functions for it,

(a) has participated or participates, in any capacity, in *design activities* or *construction* relating to any part of the *sewage system* to which the certificate relates,

(b) is or has been employed within the previous 180 days by a person who carried out *design activities* or *construction* relating to any part of the *sewage system* to which the certificate relates,

(c) has a professional or financial interest in,

(i) the *construction* of the *sewage system* to which the certificate relates,

(ii) the *sewage system* to which the certificate relates, or

(iii) the person responsible for the design of the *sewage system* to which the certificate relates, or

(d) is an elected official, officer or employee of a *principal authority*.

1.10.2. Discretionary Maintenance Inspection Programs

1.10.2.1. Scope and Application

(1) This Subsection governs, for the purposes of subsection 34(2.1) of the Act, a *maintenance inspection program* established under clause 7(1)(b.1) of the Act in respect of standards prescribed under clause 34(2)(b) of the Act in relation to *sewage systems*.

(2) Subject to Sentence (3), a *maintenance inspection program* established under clause 7(1)(b.1) of the Act applies to all *sewage systems*.

(3) A *maintenance inspection program* established under clause 7(1)(b.1) of the Act does not apply to *sewage systems* to which Subsection 1.10.1. applies.

1.10.2.2. Type, Manner and Frequency of Inspections

(1) Subject to Sentence 1.10.2.3.(1), an *inspector* shall inspect the *sewage systems* described in Sentence 1.10.2.1.(2) for compliance with Section 8.9. of Division B.

(2) The inspection described in Sentence (1) shall include a site inspection of the *sewage system*.

(3) An *inspector* undertaking an inspection described in Sentence (1) may consider reports concerning whether the *sewage system* or a part of the *sewage system* complies with the Act or this Code.

(4) The inspections required under Sentence (1) shall be undertaken,
(a) initially during the first 5 years after a *maintenance inspection program* is established under clause 7(1)(b.1) of the Act, and
(b) thereafter, once during every 5 year period after the inspection described in Clause (4)(a) has been undertaken.

1.10.2.3. Certificate as Alternative to Inspection

(1) Article 1.10.1.4. applies with necessary modifications to the inspections required under Sentence 1.10.2.3.(1).

New Appendix Note A-1.10.

A-1.10. Sewage System Maintenance Programs

Sewage system maintenance inspections are generally intended to determine whether a sewage system is in substantial compliance with the operation and maintenance requirements outlined in Section 8.9. of Division B. These inspections are undertaken by inspectors appointed by Principal Authorities in respect of maintenance inspection programs:

- Required under subsection 34(2.2) of the Building Code Act, 1992 ("Act") ("Required Programs"); and
- Established by Principal Authorities under clause 7(1)(b.1) of the Act ("Discretionary Programs").

IDENTIFICATION OF SEWAGE SYSTEM MAINTENANCE INSPECTION PROGRAM AREAS AND SEWAGE SYSTEM INVENTORY

As a first step, Principal Authorities will need to identify areas that would be subject to Required Programs, if applicable. These areas are set out in the Building Code. ***[See the proposed Sentence 1.10.1.1.(3) of Division C contained in the Consultation Paper. It is anticipated that these would be based on certain "vulnerable areas" identified in assessment reports set out in source protection plans posted on the environmental registry in accordance with section 30 of the Clean Water Act, 2006. These areas will be identified through the source protection plan development process.]***

Principal Authorities may choose to establish Discretionary Programs. These are subject to the provisions of the Building Code governing Discretionary Programs. ***[See the proposed Subsection 1.10.2. of Division C contained in the Consultation Paper. The proposed Sentence 1.10.2.1.(3) would preclude the application of Discretionary Programs to areas subject to Required Programmes].***

As a next step, Principal Authorities will need to identify existing sewage systems located within areas subject to Required Programs and Discretionary Programs. These sewage systems may be identified by reviewing:

a) Permit applications submitted under the Act;
b) Certificates of approval or use permits issued under the Environmental Protection Act;
c) Orders issued under the Act;
d) Records of problems and complaints;
e) Septage pumping records, and water use records;
f) Maintenance inspection reports (for systems that require the existence of a service agreement as a condition of use, or for systems previously inspected by the Principal Authority);
g) Identification of properties with residential or other uses not serviced by sewage systems administered by the Ministry of the Environment; and/or
h) Field surveys.

INSPECTION NOTIFICATION

Principal Authorities may find it helpful to notify property owners of the intention to inspect their property. Such notifications may include notice of:

a) Any applicable fees to be charged;
b) Procedural information;
c) Whether the Principal Authority accepts third-party certificates as an alternative to conducting an inspection; and
d) A contact name within the Principal Authority.

Such notifications are generally sent out well in advance of the inspection to give the opportunity for the property owner or representative to be on site on the day of the inspection and to gather information and records which may assist in the inspection, and also to give the property owner the opportunity to undertake remedial work prior to the inspection.

Where the Principal Authority has determined that it will accept third-party certificates as an alternative to conducting an inspection ***[see proposed Articles 1.10.1.4. and 1.10.2.3. of Division C contained in the Consultation Paper]***, the Principal Authority will generally provide sufficient time for:

a) The property owner to retain a person qualified to sign such a certificate;
b) The person retained to inspect the sewage system; and
c) Any necessary remedial work to be carried out where this will be necessary before the person may sign the certificate.

INSPECTIONS

Like most inspections under the Act, sewage systems maintenance inspections generally follow a progressive audit approach. Initial inspections tend to be non-intrusive tests. Where concerns are identified, more tests may follow.

Phase I Maintenance Inspections

Inspections generally begin with a review of available material, including that collected in the identification phase, and reports from previous inspections.

The purposes of Phase I maintenance inspections are generally to:

a) Obtain the most recent information on the system;
b) Locate the sewage system's components;
c) Identify any obvious or outward signs of malfunction or failure; and
d) Identify systems that are at risk of malfunction or failure.

Phase I maintenance inspections generally avoid significant disturbance to the system and the surrounding soil area.

During the course of a Phase I maintenance inspection, the inspector would normally identify:

a) The type of occupancy to determine the source and type of the sanitary sewage;
b) The source of water supply (municipal, well, lake, etc);
c) An estimation of the volume of sewage generated;
d) The use of special devices such as garbage grinders or water softeners;
e) The general nature of the system, (class, components, type, layout, etc);
f) The location of the system's components with respect to wells, surface water, and other environmental features;
g) Observations of ground water levels including:
   - Reviewing local maps and records of ground water elevation observed on site or nearby properties, if available;
   - Observing the conditions of the septic tank and the distribution box for indications of ground water infiltration;
   - Observing the elevation of nearby water body, or evidence of ground water infiltration in other subsurface structures; or
   - The use of hand augering to determine the depth of the system may provide indication of whether the system is located in the ground water.
h) Size, material and the condition of the septic tank, or the holding tank;
i) Date of last tank pump-out;
j) Frequency of tank pump-out and the last time the tank was cleaned;
k) External indication of septic system failure, including:
   - Evidence of backup of effluent;
   - Signs of hydraulic failure (breakout of sewage, wetting conditions in the leaching bed area);
   - Condition of surface vegetation; and
   - Odour problems.

A Phase I inspection may indicate that a sewage system does not comply with the operation and maintenance requirements of Section 8.9. of Division B. In such cases, the inspector may initiate enforcement action, including the issuance of orders under the Act.

A Phase I inspection may indicate the possibility that a sewage system is not in substantial compliance with the operation and maintenance requirements of Section 8.9. of Division B, or is at risk of future malfunction or failure. In such cases, the inspector may wish to undertake a further (Phase II) inspection and schedule future inspections.

Phase II Maintenance Inspection

It may be appropriate to undertake more intensive maintenance inspections where:

a) The Phase I maintenance inspection has identified that the septic system is at risk of future malfunction or failure, or
b) The Phase I inspection detected a malfunction or failure, but did not reveal the reason (e.g., location or nature) of malfunction or failure.

Phase II inspections may include examinations of the:

a) Depth of the sludge layer and the distance from the top of the sludge layer and the outlet tee;
b) Thickness of the scum layers;
c) Distance between the bottom of the scum/grease layer and the bottom of the outlet tee;
d) Distance between the top of the scum layer and the top of the outlet tee;
e) Physical condition of the inlet and outlet; and
f) Condition of the effluent filter, if utilized.

For septic systems utilizing treatment units, Phase II inspections may also include a review of:

a) The existence of a maintenance agreement and the date of latest servicing;
b) The test results of effluent sampling (if otherwise required by the Building Code); and
c) Operational problems or system malfunction before or, at the time of inspection.

Where used in septic systems, distribution boxes, dosing tanks and pumps may be inspected to determine their condition and functionality.

Phase II inspections of leaching beds could also consider:

a) Clearance distances to environmental features;
b) Soil type and its permeability;
c) Additional sources of hydraulic loading (e.g. surface discharge, roof drains);
d) Evidence of ponding;
e) Encroachments into the leaching bed area (e.g. building additions, patios, driveways, pools); and
f) Trees and deep rooting shrubs in the vicinity of the bed.

Blockages in the leaching bed and pollution sources may be identified by measures including:

a) Evaluation of in-home plumbing and estimates of water usage;
b) Conducting a leak diagnostics;
c) Conducting a flow trial;
d) Conducting dye tracing test; or
e) Excavating a cross section of the leaching bed.

INSPECTION REPORTS

The documentation by Principal Authorities in respect of maintenance inspections would be generally include the following information:

a) Identification of the property attended;
b) Identification of any information collected as part of the inspection;
c) Status of deficiencies noted in previous inspections;
d) Deficiencies identified during the current visit;
e) Determination whether the system in question should be subject to; more frequent inspections than required under the Code; and
f) Enforcement action taken.

Rationale: PROBLEM	Inadequate or failing sewage systems are a potential threat to drinking water.
Rationale: JUSTIFICATION	These proposed amendments are part of a series of Building Code amendments: • Establishing sewage system maintenance inspection programs that principal authorities would be required to undertake in prescribed areas; and • Governing discretionary sewage system maintenance programs that principal authorities may establish elsewhere in their area of jurisdiction.
IMPACT	The proposed amendments related to sewage system maintenance inspections would have implications for principal authorities, property owners, sewage system manufacturers, installers and designers.

OBJECTIVE BASED ANALYSIS OF THE CHANGED OR NEW PROVISION	
Provision	Division C, Section 1.10.
Objectives	Not applicable
Functional Statements	Not applicable

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February 2008	Proposed Technical Change: 2006 Building Code		
CHANGE NUMBER	C-03-01-01	CODE REFERENCE	Div. C, 3.1.4.1.(1)
DESCRIPTION OF PROPOSED AMENDMENT	Add qualifications for persons carrying out sewage system maintenance inspections		

EXISTING BUILDING CODE PROVISIONS

3.1.4. Inspectors

3.1.4.1. Qualifications

(1) Except as provided in Article. 3.1.4.2., the following are prescribed as qualifications for a person to be appointed and to remain appointed under the Act as an *inspector* whose duties include plans review or inspection under the Act

(a) the person shall successfully complete the examination program administered or authorized by the Ministry of Municipal Affairs and Housing relating to the person's knowledge of the Act and this Code in the category or categories of qualifications in Column 3 of Table 3.5.2.1. that correspond to the types of *buildings* set out in Column 4 of Table 3.5.2.1. in respect of which the person will exercise the powers or perform the duties of an *inspector* under the Act,

(b) the person shall file the information set out in Sentence 3.1.6.1.(1) with the *director* in a form established by the *director*.

PROPOSED BUILDING CODE CHANGE

Revise Sentence (1) as follows:

(1) Except as provided in Articles 3.1.4.2. and 3.1.4.3., the following are prescribed as qualifications for a person to be appointed and to remain appointed under the Act as an *inspector* whose duties include plans review or inspection under the Act

(a) the person shall successfully complete the examination program administered or authorized by the Ministry of Municipal Affairs and Housing relating to the person's knowledge of the Act and this Code in the category or categories of qualifications in Column 3 of Table 3.5.2.1. that correspond to the types of *buildings* set out in Column 4 of Table 3.5.2.1. in respect of which the person will exercise the powers or perform the duties of an *inspector* under the Act,

(b) the person shall file the information set out in Sentence 3.1.6.1.(1) with the *director* in a form established by the *director*.

Rationale: PROBLEM	Inadequate or failing sewage systems are a potential threat to drinking water.
Rationale: JUSTIFICATION	These proposed amendments are part of a series of Building Code amendments: • Establishing sewage system maintenance inspection programs that principal authorities would be required to undertake in prescribed areas; and • Governing discretionary sewage system maintenance programs that principal authorities may establish elsewhere in their area of jurisdiction.
IMPACT	The proposed amendments related to sewage system maintenance inspections would have implications for principal authorities, property owners, sewage system manufacturers, installers and designers.

OBJECTIVE BASED ANALYSIS OF THE CHANGED OR NEW PROVISION	
Provision	Division C, Sentence 3.1.4.1.(1)
Objectives	Not applicable
Functional Statements	Not applicable

February 2008	Proposed Technical Change: 2006 Building Code		
CHANGE NUMBER	C-03-01-02	**CODE REFERENCE**	Div. C, 3.1.4.
DESCRIPTION OF PROPOSED AMENDMENT	Add qualifications for persons carrying out sewage system maintenance inspections.		

EXISTING BUILDING CODE PROVISIONS

None.

PROPOSED BUILDING CODE CHANGE

Add new Article 3.1.4.3. as follows:

3.1.4.3. Qualifications for Maintenance Program Inspectors

(1) A person appointed under the Act as an *inspector* is exempt from the requirements in Article 3.1.4.1. in respect of duties consisting of *maintenance inspections* if the person is supervised by a *chief building official* or *inspector* who has successfully completed the examination program described in Clause 3.1.4.1.(1)(a) in the category of qualification described in Column 3 of Row 10 of Table 3.5.2.1.

(2) An *inspector* described in Sentence (1) shall not issue orders under the Act.

Rationale: PROBLEM	Inadequate or failing sewage systems are a potential threat to drinking water.
Rationale: JUSTIFICATION	These proposed amendments are part of a series of Building Code amendments: • Establishing sewage system maintenance inspection programs that principal authorities would be required to undertake in prescribed areas; and • Governing discretionary sewage system maintenance programs that principal authorities may establish elsewhere in their area of jurisdiction.
IMPACT	The proposed amendments related to sewage system maintenance inspections would have implications for principal authorities, property owners, sewage system manufacturers, installers and designers.

OBJECTIVE BASED ANALYSIS OF THE CHANGED OR NEW PROVISION	
Provision	Division C, Sentence 3.1.4.3.(1)
Objectives	Not applicable
Functional Statements	Not applicable

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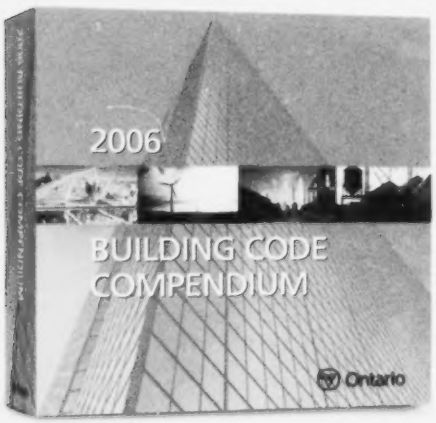
Ontario

Gicleurs résidentiels et systèmes d'égouts sur place :

Consultation sur les modifications proposées au Code du bâtiment de l'Ontario

Du 15 février au 1er mai 2008



La version électronique de ce document est disponible à www.ontario.ca/buildingcode

Available in English

Table des matières

Introduction 3

Consultation sur les gicleurs résidentiels et les systèmes d'égouts sur place : 4

Objet du document de consultation 5

Comment les commentaires seront-ils traités? 5

La réglementation du bâtiment en Ontario 6

Élaboration des codes en Ontario 6

Renseignements généraux sur les gicleurs résidentiels et le Code du bâtiment de l'Ontario 8

Quelles sont les modifications proposées en ce qui concerne l'installation de gicleurs dans les habitations? 9

Renseignements généraux sur les systèmes d'égouts sur place et le Code du bâtiment de l'Ontario 11

Quelles sont les modifications proposées en ce qui concerne les systèmes d'égouts sur place? 13

Présentation de commentaires 17

Formulaires de commentaire 20

Annexe A : Modifications techniques proposées relatives aux gicleurs résidentiels (en anglais seulement – voir la section anglaise de ce document)

Annexe B : Modifications proposées relatives à la réinspection des systèmes d'égouts sur place et aux systèmes à lit compact (en anglais seulement – voir la section anglaise de ce document)

Introduction

La *Loi de 1992 sur le code du bâtiment* (« la Loi ») établit le cadre législatif qui régit la construction, la rénovation et le changement d'utilisation des bâtiments. Le Code du bâtiment de l'Ontario (« le CBO »)) est un règlement, pris en application de cette loi, qui établit les exigences techniques et administratives.

Le par. 34(5) de la Loi établit les objectifs du CBO, à savoir établir, à l'égard des bâtiments, des normes en ce qui concerne la santé et la sécurité publiques, la protection contre les incendies, le caractère adéquat des structures, la conservation et l'intégrité environnementale ainsi que des exigences en matière d'accès facile.

Les bâtiments de l'Ontario offrent une bonne sécurité et la qualité de l'eau potable est bonne. Néanmoins, le gouvernement est d'avis qu'il est possible d'améliorer encore la sécurité des bâtiments et la qualité de l'eau. À cette fin, le ministère des Affaires municipales et du Logement (« le ministère ») souhaite recueillir votre avis sur un certain nombre de modifications proposées au CBO. Ces modifications visent d'une part à rehausser la sécurité contre l'incendie des Ontariennes et Ontariens qui vivent et travaillent dans des immeubles d'habitation, et d'autre part à renforcer la protection de l'eau potable dans la province en améliorant le rendement des systèmes d'égouts sur place, y compris ceux qui utilisent une fosse septique.

Ce document explique les modifications proposées, leur raison d'être ainsi que la façon dont vous pouvez nous communiquer vos observations sur le contenu et la pertinence de ces propositions.

Veuillez noter que les modifications proposées dans ce document ne constituent pas la politique définitive du gouvernement en la matière et que les opinions que vous exprimerez seront examinées avant que le gouvernement ne prenne une décision définitive quant aux modifications proposées au Code du bâtiment relatives aux gicleurs résidentiels et aux systèmes d'égouts sur place.

Consultation sur les gicleurs résidentiels et les systèmes d'égouts sur place :

Le gouvernement propose d'apporter des modifications au Code du bâtiment de l'Ontario (CBO) qui :

- exigeraient l'installation de gicleurs dans les immeubles multirésidentiels dont la hauteur de bâtiment dépasse trois étages;
- introduiraient de nouvelles dispositions administratives relatives à l'entretien (ou la réinspection) des systèmes d'égouts sur place existants;
- établiraient des dispositions techniques pour réglementer les lits d'épuration des unités de traitement tertiaire (« lits compacts ») qui font partie intégrante de certains systèmes d'égouts sur place.

Le ministère procède actuellement à une consultation auprès du public pour obtenir son opinion sur le contenu et l'opportunité des modifications proposées. Nous vous encourageons à participer à cette étape importante de l'élaboration du code.

Vous trouverez dans ce document un aperçu général du **contenu** des modifications proposées et des **motifs** pour lesquels elles sont proposées. Vous trouverez aussi (en anglais seulement) le texte intégral des modifications proposées pour examen et commentaires.

Afin de vous aider à préparer une réponse dans le cadre de cette consultation, nous avons inclus, à la fin de ce document, une liste de questions qui permettent de réfléchir à l'impact des modifications proposées.

Ce document explique aussi comment vous pouvez faire parvenir vos commentaires par Internet, par courriel, par la poste ou par télécopieur. Il contient des formulaires de commentaire, mais vous pouvez au besoin joindre tout document additionnel sous la forme qui vous convient le mieux pour exprimer votre point de vue sur les modifications proposées au CBO.

Les commentaires que nous recevrons dans le cadre de cette consultation contribueront à guider la rédaction des propositions de modifications au CBO relatives aux gicleurs résidentiels et aux systèmes d'égouts sur place.

Objet du document de consultation

Ce document de consultation a pour objet :

- de vous informer sur le contenu et la raison d'être des modifications proposées au Code du bâtiment de l'Ontario (CBO);
- d'assurer la participation du public et des utilisateurs du code, notamment des constructeurs, des installateurs, des fabricants ou fournisseurs, des concepteurs, des agents d'exécution et des propriétaires d'immeubles, au processus de mise à jour du CBO;
- d'obtenir votre opinion sur le contenu et l'opportunité des modifications proposées au CBO concernant les gicleurs résidentiels ainsi que la réinspection et les lits d'épuration compacts des systèmes d'égouts sur place.

L'élaboration et l'évolution du CBO ont toujours reposé sur le soutien et la participation de nos partenaires.

Comment les commentaires seront-ils traités?

À l'issue de la consultation, le ministère transmettra les modifications proposées et tous les commentaires reçus à ses comités techniques consultatifs du Code du bâtiment (CTC). Ces CTC, où siègent des experts techniques constituant une représentation large, équilibrée et indépendante des intervenants, examineront les modifications proposées et tous les commentaires reçus. Ils feront ensuite des recommandations au ministère sur les modifications, notamment s'il y a lieu de les adopter telles qu'elles ont été proposées ou de les réviser.

La réglementation du bâtiment en Ontario

La *Loi de 1992 sur le code du bâtiment* (« la Loi ») établit le cadre législatif qui régit la construction, la rénovation et le changement d'utilisation des bâtiments. Le Code du bâtiment de l'Ontario (« le CBO ») est un règlement, pris en application de la Loi, qui établit les exigences techniques et administratives.

L'exécution de la Loi et du CBO relève de la responsabilité des autorités principales (municipalités, offices de protection de la nature et conseils de santé).

Le CBO a les objets suivants :

- établir, à l'égard des bâtiments, des normes en ce qui concerne la santé et la sécurité publiques, la protection contre les incendies, le caractère adéquat des structures, la conservation et l'intégrité environnementale ainsi que des exigences en matière d'accès facile;
- établir des marches à suivre pour faire respecter ces normes.

Le CBO ne contient pas de normes relatives à la sécurité-incendie applicables aux bâtiments existants. La sécurité contre l'incendie dans les bâtiments existants est réglementée par le Code de prévention des incendies, un règlement pris en application de la *Loi de 1997 sur la prévention et la protection contre l'incendie* (LPPI). Le Code de prévention des incendies et la LPPI sont administrés par le ministère de la Sécurité communautaire et des Services correctionnels.

Élaboration des codes en Ontario

L'Ontario contribue à l'élaboration des codes fédéraux/provinciaux et territoriaux du Canada, et le Code du bâtiment de l'Ontario (CBO) est harmonisé, dans une large mesure, avec le modèle que constitue le Code national du bâtiment du Canada (CNB). Toutefois, dans certains domaines, l'Ontario a décidé d'appliquer d'autres priorités stratégiques. Par exemple, l'Ontario a des normes spécifiques pour les gares de transport en commun rapide,

l'efficacité énergétique, la conservation de l'eau et les systèmes d'égouts sur place – des sujets qui ne sont pas visés par le CNB. L'Ontario a aussi inclus dans le CBO des normes relatives à l'accès sans obstacle qui dépassent celles préconisées dans le CNB.

Une nouvelle version du CBO est publiée environ tous les cinq ans. La version actuelle est entrée en vigueur en 2006. Il est prévu que la prochaine sera publiée en 2010-2011, à la suite de la publication de la prochaine version du CNB, elle-même prévue pour 2010.

Le CBO fait toutefois l'objet de modifications intérimaires en attendant la publication de la nouvelle version. La présente consultation propose des modifications intérimaires au CBO 2006.

Veuillez noter que les modifications proposées dans ce document ne constituent pas la politique définitive du gouvernement en la matière et que les opinions que vous exprimerez seront examinées avant que le gouvernement ne prenne une décision définitive quant aux modifications proposées au Code du bâtiment relatives aux gicleurs résidentiels et aux systèmes d'égouts sur place.

Renseignements généraux sur les gicleurs résidentiels et le Code du bâtiment de l'Ontario

Renforcer encore la sécurité

Les bâtiments de l'Ontario offrent un excellent niveau de sécurité. Le nombre relatif d'incendies mortels dans la province compte parmi les plus faibles du Canada. Depuis l'introduction du premier code du bâtiment en Ontario, il y a plus de 30 ans, le nombre relatif d'incendies mortels a enregistré une baisse constante et la sécurité contre l'incendie dans les immeubles d'habitation s'est nettement améliorée.

La baisse des taux d'incendies est en partie le résultat des améliorations apportées au Code du bâtiment au cours des ans. Par exemple, le Code du bâtiment de l'Ontario (CBO) exige maintenant :

- l'installation d'avertisseurs de fumée à chaque étage dans les maisons;
- l'interconnexion des avertisseurs d'incendie dans une maison;
- des systèmes de détection et d'avertissement améliorés dans les grands bâtiments.

Ainsi, les nouveaux immeubles d'habitation offrent une sécurité bien plus élevée que les plus anciens.

L'adoption d'exigences de mise à niveau obligatoire dans le cadre du Code de prévention des incendies a aussi contribué à la diminution du nombre d'incendies mortels dans les habitations. Le Code de prévention des incendies contient des exigences pour les tours d'habitation, les petits immeubles d'habitation et les maisons à deux logements. Il exige aussi l'installation d'avertisseurs de fumée à tous les étages des maisons existantes.

Des programmes d'éducation et de sensibilisation du public et des programmes d'inspection dans les habitations (p. ex, pour vérifier que les avertisseurs de fumée sont correctement installés et sont toujours en état de fonctionner) ont aussi contribué à la réduction du nombre des décès dus aux incendies.

Comme nous l'avons mentionné ci-dessus, le Code du bâtiment de l'Ontario (CBO) est harmonisé, dans une large mesure, avec le Code national du bâtiment du Canada (CNB). Toutefois, l'approche retenue dans le CBO à l'égard de la sécurité-incendie dans les grands immeubles d'habitation (de plus de trois étages) diffère de celle du code modèle national. En effet, alors que le CNB exige l'installation de gicleurs, le CBO met plutôt l'accent sur d'autres mesures comme des systèmes de détection et d'alarme incendie plus perfectionnés, des réseaux de canalisations d'incendie, la protection des ascenseurs utilisés par les pompiers, des limites sur les matériaux combustibles, la limite de la distance à parcourir jusqu'à une issue ainsi que la protection des issues et des séparations coupe-feu contre l'infiltration de fumée.

Depuis que le CNB a été modifié en 1995 pour exiger l'installation de gicleurs dans les grands immeubles d'habitation, d'autres provinces et territoires ont adopté cette approche. La plupart des juridictions aux États-Unis exigent aussi l'installation de gicleurs dans les immeubles d'habitation d'une certaine hauteur.

Même si l'approche adoptée par l'Ontario dans le passé a permis d'obtenir de bons résultats en ce qui concerne la sécurité dans les habitations, le gouvernement est à la recherche de nouveaux moyens de maintenir la position d'avant-garde de l'Ontario sur le plan de la sécurité-incendie dans les bâtiments.

Quelles sont les modifications proposées en ce qui concerne l'installation de gicleurs dans les habitations?

Il est proposé de modifier le Code du bâtiment de l'Ontario (CBO) pour exiger que tous les nouveaux immeubles multirésidentiels de plus de trois étages soient protégés par des gicleurs. La protection par des gicleurs à l'intérieur du bâtiment s'étendrait aux logements, aux espaces techniques et aux aires communes comme les corridors.

Les exigences proposées viseraient aussi les sections réservées à l'habitation dans les bâtiments à usages

multiples de plus de 3 étages. Depuis 1997, le code exige, de façon générale, l'installation de gicleurs dans toutes les aires affectées à un usage autre que l'habitation dans les bâtiments de grande hauteur.

Ce document de consultation ne propose pas d'exiger l'installation de gicleurs dans les bâtiments d'habitation plus petits, notamment dans les maisons, ni de rendre leur installation obligatoire dans les bâtiments existants.

Par ailleurs, l'exigence proposée relative aux gicleurs résidentiels s'accompagne d'autres modifications proposées pour coordonner d'autres dispositions relatives à la sécurité-incendie du CBO avec celles du CNB. Par exemple, les exigences du CBO relatives aux détecteurs de chaleur, au contrôle de la fumée, au revêtement extérieur combustible et aux murs coupe-feu seraient, pour l'essentiel, harmonisées avec celle du CNB.

Transition

Il est proposé que les modifications au CBO relatives aux gicleurs résidentiels entrent en vigueur le 1er septembre 2009.

Renseignements généraux sur les systèmes d'égouts sur place et le Code du bâtiment de l'Ontario

On estime qu'il y a environ 1,2 million de systèmes d'égouts sur place en Ontario. À condition d'être correctement conçu, installé et entretenu conformément au Code du bâtiment de l'Ontario (CBO), un système d'égouts sur place contribue à la salubrité de l'eau potable et à la protection de l'environnement.

En 1998, le CBO a été modifié pour y inclure des normes applicables à la construction et à la rénovation des systèmes d'égouts sur place qui desservent des maisons ou des petits bâtiments, qui sont entièrement contenus sur un même lot et dont la capacité de traitement ne dépasse pas 10 000 litres d'eaux usées par jour. Les systèmes d'égouts plus grands et plus complexes relèvent de la *Loi sur les ressources en eau de l'Ontario* administrée par le ministère de l'Environnement

Le CBO réglemente la construction, l'installation, la réparation, la modification et l'agrandissement des systèmes d'égouts sur place. Le CBO classe ces systèmes comme suit :

- Classe 1 – toilette chimique, toilette à incinérateur, toilette à recirculation, toilette portative autonome, et toutes formes de latrines, y compris les latrines portatives, les latrines à simple trou, les latrines à seau, les latrines à fosse ainsi que les systèmes de toilettes à compost;
- Classe 2 – système d'évacuation des eaux grises;
- Classe 3 – fosse d'aisances;
- Classe 4 – système à lit d'épandage;
- Classe 5 – système exigeant ou utilisant un réservoir de rétention pour les eaux usées produites sur place avant que celles-ci soient transportées ailleurs par un service spécialisé dans le transport des eaux usées.

Le CBO contient aussi des exigences pour l'exploitation et l'entretien des systèmes d'égouts sur place. Il exige notamment que tous les systèmes d'égouts sur place soient exploités et entretenus de façon à prévenir la résurgence d'effluents en surface, les fuites depuis une composante quelconque du système et la contamination des eaux souterraines ou de surface. De plus, ces systèmes doivent être utilisés conformément aux conditions sur la base desquelles leur construction a été approuvée et selon les recommandations du fabricant.

Il existe une grande variété de systèmes de classe 4, la classe la plus courante de petits systèmes d'égouts sur place en Ontario. La plupart des systèmes de la classe 4 comprennent une fosse septique et un lit d'épandage (champ d'épuration) et utilisent la force de la gravité pour l'écoulement des eaux usées d'une composante à l'autre du système.

Certains systèmes de classe 4 comprennent des éléments additionnels, comme des pompes, des filtres et des unités secondaires et tertiaires de traitement. Aux termes du CBO, un système de classe 4 qui comprend une unité tertiaire de traitement peut être conçu avec un système particulier d'infiltration composé de tranchées enterrées à faible profondeur. De plus, d'autres systèmes de classe 4 qui utilisent une unité de traitement tertiaire peuvent être conçus avec un système d'absorption similaire à un petit champ d'épuration ou « lit compact » (« area bed » en anglais)

Le CBO ne contient pas de normes pour les systèmes à « lit compact », mais la Commission d'évaluation des matériaux de construction en a autorisé l'utilisation.

Cette commission est un organisme de réglementation, créé en vertu de la *Loi de 1992 sur le code du bâtiment,* qui a pour mandat d'évaluer les nouveaux systèmes, conceptions et matériaux non traditionnels utilisés dans la construction en Ontario. Depuis 1998, la Commission a délivré huit autorisations visant l'utilisation de systèmes à « lit compact » en Ontario. (Les autorisations de la Commission sont disponibles [en anglais seulement], sur le site Web du Code du bâtiment, à www.ontario.ca/buildingcode.)

Aux termes de la *Loi de 1992 sur le code du bâtiment* et du Code du bâtiment, l'exécution des dispositions de la Loi et du CBO relève de la responsabilité des autorités principales (municipalités, offices de protection de la nature et conseils de santé).

Quelles sont les modifications proposées en ce qui concerne les systèmes d'égouts sur place?

Ce document de consultation propose deux types de modifications au CBO en ce qui concerne les systèmes d'égouts sur place :

- des dispositions administratives pour l'inspection d'entretien (ou la réinspection) des systèmes déjà installés;
- des exigences techniques pour les systèmes à lit compact.

1) Dispositions administratives pour l'inspection d'entretien

À la suite des événements de Walkerton en 2000, le gouvernement de l'Ontario a nommé une commission d'enquête publique qui a donné lieu à la publication du rapport du juge Dennis O'Connor, en 2002. Ce rapport concluait que l'eau potable devrait être protégée à la source, dans le cadre d'une planification concertée. Les systèmes septiques qui ne sont pas installés correctement et sont mal entretenus ont été identifiés comme l'une des sources possibles de contamination de l'eau potable.

Pour donner suite au rapport du juge O'Connor, le gouvernement a présenté la *Loi de 2006 sur l'eau saine*, qui est entrée en vigueur le 3 juillet 2007. Cette loi permet aux collectivités de protéger leurs sources d'eau potable municipales en créant des comités multipartites chargés d'élaborer des plans de protection coordonnés, fondés sur des études scientifiques et axés sur les conditions locales. Ces comités évalueront les risques potentiels pour les sources d'eau et détermineront les mesures à prendre pour éliminer ces risques ou les réduire.

La *Loi de 2006 sur l'eau saine* incluait des modifications complémentaires à la *Loi de 1992 sur le code du bâtiment* en ce qui concerne les programmes d'inspection des systèmes d'égouts sur place.

Ces modifications autorisent l'adoption de règlements pour établir des programmes visant à s'assurer du respect des normes du CBO relatives à l'entretien et à l'exploitation des systèmes d'égouts existants et pour exiger que ces programmes soient exécutés par les autorités principales.

Il est proposé que les programmes d'inspection d'entretien requis s'appliquent aux systèmes d'égouts situés dans des régions prescrites. On prévoit que ces régions correspondront à un sous-ensemble des « zones vulnérables » identifiées dans un rapport d'évaluation faisant partie d'un plan de protection des sources, dont l'article 30 de la *Loi de 2006 sur l'eau saine* prévoit l'affichage sur le Registre environnemental. La méthode à utiliser pour délimiter ces zones sera précisée dans des règles techniques qui seront publiées en vertu de la *Loi de 2006 sur l'eau saine*.

Pour toute question relative à la *Loi de 2006 sur l'eau saine* et aux plans de protection des sources, s'adresser à :

« Demandez au spécialiste »
à source.protection@ontario.ca
Directeur des programmes de protection des sources
Ministère de l'Environnement
2, avenue St. Clair Ouest, 8^{e} étage
Toronto ON M4V1L5

Les modifications à la *Loi de 1992 sur le code du bâtiment* autorisent aussi les autorités principales à établir des programmes d'inspection d'entretien « discrétionnaires » pour les systèmes d'égouts existants. Ces programmes seraient assujettis aux dispositions du CBO.

Les modifications à la *Loi de 1992 sur le code du bâtiment* autorisent les autorités principales à adopter des règlements municipaux, des règles ou des résolutions régissant ces deux types de programmes.

Aux termes des modifications à la *Loi de 1992 sur le code du bâtiment,* le CBO peut autoriser les autorités principales à accepter un certificat (« certificat d'une tierce partie), au lieu d'effectuer elles-mêmes les inspections, attestant qu'un système d'égouts a été inspecté et qu'il est conforme aux dispositions applicables du Code du bâtiment.

Ce document de consultation propose d'apporter des modifications au CBO pour y inclure les détails suivants en ce qui concerne les programmes obligatoires et discrétionnaires d'inspection d'entretien :

- les classes de systèmes d'égouts visées;
- les zones visées;
- les qualifications que les inspecteurs doivent posséder;
- la fréquence des inspections;
- les conditions applicables aux certificats délivrés par une tierce partie.

Les normes proposées pour les inspections d'entretien visent à évaluer la conformité des systèmes d'égouts sur place existants à l'article 8.9 du CBO relatif à l'exploitation et l'entretien. Les modifications administratives proposées visent à s'assurer de la conformité à l'article 8.9 afin de mieux soutenir les objectifs de protection de la santé et d'intégrité environnementale du CBO.

Ce document de consultation propose d'élaborer une méthodologie pour les inspections d'entretien sous forme de note d'annexe au CBO. Les autorités principales pourraient s'inspirer de cette méthodologie lors de l'élaboration de programmes d'inspection d'entretien des systèmes d'égouts sur place.

Transition

Il est proposé que les dispositions du CBO relatives aux programmes d'inspection d'entretien discrétionnaires entrent en vigueur le 1er janvier 2009.

Les programmes requis n'entreront pas en vigueur avant que le ministre de l'Environnement ait approuvé un plan de protection des sources pour une zone donnée. Ces plans sont requis aux termes du Règl. de l'Ont. 285/07 pris en

application de la *Loi de 2006 sur l'eau saine*, et devraient être présentés au ministre de l'Environnement d'ici 2012.

2) Exigences techniques : systèmes à lit compact

Le ministère souhaite aussi recevoir des commentaires sur les modifications techniques proposées à la Partie 8 de la Division B, en ce qui concerne la conception et la construction des systèmes septiques à lit compact.

Un lit compact est un lit d'épuration utilisé avec un système septique qui comprend une unité de traitement tertiaire figurant dans la liste des normes supplémentaires (SB-5) du CBO. Ces lits compacts sont conçus pour effectuer un traitement additionnel des effluents et les disperser dans le sol. Ils sont constitués de la superposition d'une couche de pierres sur une couche de sable et peuvent être installés dans le sol ou dessus.

Le CBO ne contient pas à l'heure actuelle de dispositions spécifiques en ce qui concerne la conception et la construction de ces systèmes. Le ministère propose d'établir des normes relatives aux lits compacts dans le CBO.

Plus précisément, les exigences proposées pour la construction de ces lits compacts incluent :

- les dimensions de leur encombrement au sol;
- le dimensionnement des couches de pierre et de sable et les circonstances dans lesquelles il faut ajouter une couche de matériau de remplissage externe;
- leur épaisseur et le type de sable à utiliser;
- des moyens d'assurer une bonne distribution des effluents;
- l'entretien et les essais requis.

Transition

Il est proposé que les modifications au CBO relatives aux systèmes à lit compact entrent en vigueur dès le dépôt du règlement.

Présentation de commentaires

Nous vous encourageons à nous faire part de vos commentaires sur les modifications techniques et administratives proposées. Votre participation active contribue à assurer que les modifications proposées au Code du bâtiment de l'Ontario (CBO) sont bien fondées, réalisables sur les plans technique et économique et qu'elles sont exécutables.

Remarque : Cette copie « imprimée » ou « papier » du document de consultation est reproduite en version électronique sur le site Web du CBO à www.ontario.ca/buildingcode, qui contient aussi un formulaire pour la présentation en ligne des commentaires.

Étapes à suivre pour présenter des commentaires :

- Lisez attentivement ce document de consultation, y compris le texte des propositions proprement dites.
- Remplissez la partie A du formulaire de commentaire joint au présent document de consultation.
- Remplissez la partie B, la partie C ou les deux, selon les modifications proposées sur lesquelles vous souhaitez faire des commentaires.

Votre réponse dans le cadre de cette consultation doit parvenir au ministère au plus tard le :

Date limite

1er mai 2008

Afin que la présentation de vos commentaires soit la plus efficace possible et pour nous permettre de bien comprendre votre point de vue, nous vous demandons de formuler des commentaires qui se rapportent directement aux modifications proposées dans cette consultation. Un commentaire qui se rapporterait à d'autres dispositions du code pour lesquelles aucune modification n'est proposée ne sera pas pris en compte dans le cadre de cette consultation. Néanmoins, si vous souhaitez formuler des commentaires sur d'autres dispositions du code, vous pouvez le faire en remplissant le formulaire de modification proposée au Code du bâtiment de l'Ontario de 2006, que vous trouverez sur le site Web du Code du bâtiment à

www.ontario.ca/buildingcode

Si vous n'êtes pas en faveur des modifications proposées, ou si vous souhaitez qu'elles soient amendées, veuillez joindre une explication des motifs justifiant votre position afin d'aider le ministère et les comités techniques du code à comprendre votre point de vue.

Pour l'examen des modifications proposées, nous vous encourageons à tenir compte d'un certain nombre de facteurs liés aux avantages et à l'impact de ces modifications. Vous trouverez ci-dessous certains facteurs à considérer.

Pour faciliter le suivi, veuillez inclure les renseignements suivants dans chaque formulaire de commentaires :

- votre nom,
- votre adresse postale,
- si vous répondez en votre nom propre ou au nom d'un organisme.

Les formulaires de commentaires remplis et les pièces justificatives peuvent être envoyés au ministère par le biais du site Web, par courriel, par télécopieur ou par la poste.

www.ontario.ca/buildingcode:

Ce site permet de soumettre des commentaires en ligne.

Courriel :

sabina.filipescu@ontario.ca

Veuillez indiquer sur la ligne d'objet du message :
Consultation de 2008 sur le Code du bâtiment

Adresse postale :

Consultation de 2008 sur le Code du bâtiment
c/o Direction du bâtiment et de l'aménagement
Ministère des Affaires municipales et du Logement
777, rue Bay, 2e étage
Toronto ON
M5G 2E5

Télécopieur :

416 585-7531

Veuillez indiquer sur la ligne d'objet de la transmission :
Consultation de 2008 sur le Code du bâtiment

Les questions sur la consultation peuvent être adressées à l'une ou l'autre des personnes suivantes :

- David Brezer, directeur et chef du service du bâtiment

  416 585-6656

- Sabina Filipescu, conseillère en politiques

  416 585-6753

Formulaires de commentaire

Voici une liste de questions à considérer lors de la préparation de commentaires dans le cadre de la consultation.

Questions à considérer concernant les modifications proposées pour les gicleurs résidentiels

1. Les modifications proposées au code sont-elles cohérentes avec l'objectif énoncé d'améliorer la sécurité publique? Selon vous, quels seraient les avantages de ces modifications du point de vue de la protection des vies humaines?

2. Y a-t-il des coûts additionnels de construction et d'entretien périodiques liés aux gicleurs résidentiels qu'il y aurait lieu d'examiner?

3. Quels sont les avantages économiques résultant de la fabrication, de l'installation et de la mise à l'essai des réseaux de gicleurs dans les immeubles multirésidentiels de plus de trois étages?

4. L'industrie possède-t-elle la capacité suffisante pour la conception, la fabrication, la fourniture, l'installation, l'entretien et la mise à l'essai des réseaux de gicleurs dans les immeubles multirésidentiels de plus de trois étages?

5. La période de transition proposée donne-t-elle à l'industrie et aux intervenants suffisamment de temps pour se préparer à mettre en œuvre les modifications proposées?

6. Existe-t-il d'autres solutions qui permettraient d'obtenir des résultats similaires du point de vue de la sécurité-incendie?

7. Est-il possible de faire respecter les modifications proposées telles qu'elles sont rédigées? Quel sera

leur impact sur les organismes chargés de l'exécution?

8. Ces modifications nécessiteront-elles une formation technique additionnelle pour les agents du bâtiment, les concepteurs, les gens de métier, etc.?

Questions à considérer concernant les modifications proposées pour les systèmes d'égouts sur place

1. Quels sont les avantages économiques résultant de la fabrication, de l'installation et de la mise à l'essai des systèmes septiques?

2. L'industrie possède-t-elle la capacité suffisante pour la conception, la fabrication, la fourniture, l'installation, l'entretien et la mise à l'essai des systèmes septiques?

3. Les normes techniques proposées pour les lits d'épuration compacts offrent-elles un niveau acceptable de protection de la santé et de la sécurité publiques et de protection de l'environnement?

4. La période de transition proposée donne-t-elle à l'industrie et aux intervenants suffisamment de temps pour se préparer à mettre en œuvre les modifications proposées?

5. Y a-t-il d'autres solutions au niveau de l'application (p. ex., qualifications des inspecteurs, fréquences des inspections) qui permettraient d'obtenir des résultats similaires?

6. Les modifications proposées sont-elles faciles à faire respecter? Quel en sera l'impact pour les autorités locales chargées d'effectuer les inspections d'entretien?

7. La méthodologie proposée pour les inspections d'entretien est-elle utile? Si oui, sous quelle forme devrait-elle adoptée (p. ex., règlement intégré au Code du bâtiment, note d'annexe)?

8. Ces modifications nécessiteront-elles une formation technique additionnelle pour les agents du bâtiment, les concepteurs, les installateurs, les entreprises qui font la vidange, etc.?

Formulaires de commentaire *

A. Renseignements sur l'auteur de la réponse

Nom : _____

Titre : _____

Je réponds : ❒ en mon nom personnel
❒ pour un organisme (préciser lequel) : _____

Fonction : ❒ Agent du bâtiment ❒ Concepteur ❒ Fournisseur ou fabricant
❒ Constructeur ou entrepreneur ❒ Installateur ou transporteur ❒ Propriétaire de maison ou grand public
❒ Autre (préciser) : _____

Adresse : _____

Ville : _____ **Province :** _____ **Code postal :** _____

Les renseignements personnels fournis dans le cadre de la consultation publique sur les modifications au code relatives aux gicleurs dans les habitations et aux systèmes d'égouts sur place sont recueillis en conformité avec le paragraphe 38 (2) de la Loi sur l'accès à l'information et la protection de la vie privée, L.R.O. 1990, chap. F.31, à des fins de consultation et pour nous permettre de communiquer avec vous si nous avons besoin de précisions concernant votre réponse à cette consultation.

Les réponses à la consultation (sans l'adresse des répondants, si celle-ci a été fournie) pourront être communiquées aux comités chargés de l'élaboration des codes nationaux et provinciaux du bâtiment et de prévention des incendies.

Toute question relative à la collecte de renseignements personnels peut être adressée à James Ross, Direction du bâtiment et de l'aménagement, ministère des Affaires municipales et du Logement, 777, rue Bay, 2e étage, Toronto ON 416 585-4243. Télécopieur : (416) 585-7531.

* Remarque : Cette copie « papier » du document de consultation est reproduite en version électronique sur le site Web du CBO à www.ontario.ca/buildingcode, qui contient aussi un formulaire pour la présentation en ligne des commentaries.

Formulaires de commentaire *(suite)*

B. Exigences proposées relatives aux gicleurs résidentiels

Cochez l'une des réponses avec un «x» :

- ❒ J'appuie la modification proposée relative aux **gicleurs dans les immeubles d'habitation**.
- ❒ J'appuierais la modification proposée relative aux **gicleurs dans les immeubles d'habitation** si elle était modifiée comme suit (veuillez préciser ci-dessous)
- ❒ Je n'appuie pas la modification proposée relative aux **gicleurs dans les immeubles d'habitation** (veuillez préciser le motif ci-dessous).

Commentaires *(Joindre au besoin des feuilles supplémentaires)* **:**

Formulaires de commentaire *(suite)*

C. Modifications proposées relatives aux systèmes d'égouts sur place

Cochez l'une des réponses avec un «x» :

- ❒ J'appuie les modifications proposées relatives aux **systèmes d'égouts sur place**
- ❒ J'appuierais la modification proposée relative aux **systèmes d'égouts sur place** si elle était modifiée (veuillez préciser ci-dessous)
- ❒ Je n'appuie pas la modification proposée relative aux **systèmes d'égouts sur place**

Commentaires *(Joindre au besoin des feuilles supplémentaires) :*